

Future analysis “Governance model for the European Union IT Agency (eu-LISA)”

Riigikantselei

Government Office of Estonia

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Laura Viilup
Riigikantselei
Rahukohtu 3
15161 Tallinn

21st of May 2020

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Authors of the study are:

François-Xavier Chevallerau – PricewaterhouseCoopers, Société cooperative
Philippe Pierre - PricewaterhouseCoopers, Société cooperative
Marili Männik - PricewaterhouseCoopers, Société cooperative
Bastian Vomhof - PricewaterhouseCoopers, Société cooperative
Karmen Limmer - AS PricewaterhouseCoopers Advisors
Teet Tender – AS PricewaterhouseCoopers Advisors

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Should you have any questions concerning this report, please contact Karmen Limmer (phone: +372 614 1800; e-mail: karmen.limmer@pwc.com) and/or François-Xavier Chevallerau (phone: +352 621 332 103; e-mail: francois-xavier.chevallerau@pwc.com).

Yours faithfully,
(digitally signed)

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They are intended as a tentative answer to the analysis questions laid down by the Government Office of Estonia in its call for tenders for the performance of a Future analysis "Governance model for the European Union IT Agency (eu-LISA)", based on a documentation review and on a small number of interviews carried out over a limited period of time.

Most of the findings would need to be refined and confirmed through an iterative and collaborative process with other interested stakeholders, in order to provide a full picture of the possibilities that may exist for extending the mandate of the eu-LISA agency and for adapting its governance model to a wider scope of activities in the future.

Any possible decision to extend the eu-LISA mandate to other policy areas/sectors than the Area of Freedom, Security and Justice would be political in nature, would involve a multiplicity of stakeholders at EU and national level, and would entail many complex and inter-related dimensions. It is not in scope of this analysis to provide any opinion or advice with regards to the opportunity or the modalities of such decision.

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Kokkuvõte

Euroopa Liit (EL) ja EL liikmesriigid arendavad ja haldavad paljudes valdkondades järjest rohkemaid üleeuroopalisi IT-süsteeme. Praegusel digitaalajastul on selliste süsteemide arendus ja toimimine võimaldanud ja edasi viinud Euroopa integratsiooni ning EL toetub neile järjest enam oma poliitika rakendamisel ja elluviimisel.

Aastal 2011 asutas EL vabadusel, turvalisusel ja õigusel rajaneval alal ameti, mis haldaks teatud üleeuroopalisi IT-süsteeme. Ameti nimi on Vabadusel, Turvalisusel ja Õigusel Rajaneva Ala Suuremahuliste IT-süsteemide Operatiivjuhtimise Euroopa Amet (eu-LISA). Ametile on usaldatud mitmete selliste IT-süsteemide haldus, mis on Schengeni ala kaitsmiseks hädavajalikud instrumendid, toetavad piirihaldust ning aitavad rakendada ELi varjupaiga- ja viisapoliitikat. Alates 2011. aastast on ametil olnud oluline roll liikmesriikide ja Euroopa Liidu kodanike turvalisuse tagamisel.

Aastal 2018 laiendati eu-LISA volitusi märkimisväärselt. Ameti ülesandeks anti vabadusel, turvalisusel ja õigusel rajaneval alal mitme uue ja olulise süsteemi kavandamine, arendamine ja hilisem haldus ning selliste komponentide arendamine, mis võimaldaks vabadusel, turvalisusel ja õigusel rajaneval alal suuremahuliste IT-süsteemide koostalitlust. Laiendatud volitused markeerivad eu-LISA jaoks uut kurssi, sest see hõlmab ameti senise põhitegevuse olulist arengut (põhitegevuse laienemist). See tähendab liikumist olemasolevatelt ja üsna stabiilsete süsteemide haldamiselt süsteemide kavandamise ja arendamise valdkonda, pingelises ajakavas ja arvestades uusi süsteeme (EES ja ETIAS), mis on ELi Euroopa välispiiri kaitsmise poliitika eesmärkide täitmiseks väga olulised. Lisaks sisaldab see ameti jaoks esimest korda sisevaldkonnast kaugemale liikumist, et arendada ja hiljem hallata õigusvaldkonna IT-süsteemi (ECRIS-TCN-süsteem) ja teha seega koostööd teistsuguste „klientide“ ja huvitatud osapooltega.

Euroopa Komisjon hindab eu-LISA suutlikkust 2023. aasta lõpus ning pärast seda iga viie aasta järel. Hindamine hõlmab eu-LISA asutamismääruse rakendamise hindamist ning seda, kuidas ja kui palju amet on panustanud suuremahuliste IT-süsteemide operatiivjuhtimisse ning panustanud vabadusel, turvalisusel ja õigusel rajaneval alal ELi tasandil koordineeritud, kulutõhusa ja ühtse IT-keskkonna loomisse. Samuti hinnatakse ameti volituste muutmise vajadust.

Seetõttu soovib Eesti Vabariik, mille pealinnas Tallinnas eu-LISA peakontor asub, hinnata, kas ja millisel määral võiks eu-LISA ELi IT-süsteemide ja -lahenduste kavandamisel ja arendamisel suuremat rolli mängida, võimalik et ka vabadusel, turvalisusel ja õigusel rajanevast alast väljaspool. Eesti Vabariigi Riigikantselei on tellinud käesolevaga analüüsi eu-LISA praeguste volituste laiendamise ning juhtimismudeli muutmise võimaluste kohta, et tulevikus oleks võimalik delegeerida ametile eri poliitikavaldkondade üleeuroopaliste IT-süsteemide ja koostalitluslahenduste operatiivjuhtimist ja IT-süsteemide majutust. Teisisõnu on analüüsi eesmärk hinnata, kas eu-LISA oleks võimalik ümber kujundada valdkonnaüleseks ELi IT-ametiks, millele saaks usaldada mitmete ELi poliitikavaldkondade infosüsteemide ja IT-lahenduste arendamise ja haldamise, ning uurida, milliseid muudatusi tuleks teha eu-LISA juhtimismudelis, et ümberkujundamine oleks võimalik.

Vastavalt Riigikantselei läbiviidud avaliku hanke tulemusele on analüüsi teostajaks PwC. Analüüsi teostamise periood oli 2019. aasta novembrist kuni 2020. aasta aprillini, tuginedes ulatuslikule dokumendianalüüsile (vt lisa 2) ja konsultatsioonidele huvitatud osapooltega (vt lisa 3). Analüüs sisaldas mh eu-LISA praeguste volituste ja juhtimismudeli ülevaatus ja hindamist ning võimalike juhtimismudelite uurimist ja hindamist juhuks, kui eu-LISAst peaks tulevikus volituste laiendamisega saama ELi valdkondadeülene IT-amet. Analüüsi olulisemad leiud on esitatud järgnevalt.

eu-LISA olemasolev juhtimismudel ei ole piisavalt skaleeritav ning seda tuleb arendada

Analüüsist selgus, et eu-LISA praegune juhtimismudel on enamiku intervjueeritud huvitatud osapoolte hinnangul ameti 2018. aasta kehtestatud määruses sätestatud volitustega kooskõlas, toetab tõhusalt nende volituste täitmist ning on viimastel aastatel märgatavalt arenenud.

Siiski tajutakse, et eu-LISA praegune juhtimismudel on tulenevalt ameti laienevatest töökohustustest kasvavalt üle koormatud. Seda seetõttu, et ameti roll on muutumas olemasolevate süsteemide haldajast uute arendajaks ning senine juhtimisstruktuur põhineb endiselt vertikaalselt eraldatud üksustel, mis loodi vertikaalselt neid süsteeme silmas pidades, mille haldus ja arendamine ametile usaldati.

Vertikaalselt eraldatud üksustel põhinev juhtimissüsteem ei paista olevat skaleeritav ning tõenäoliselt ei võimaldaks see ametil võtta vastutust vabadusel, turvalisusel ja õigusel rajanevast alast väljapoole ulatuvate IT-süsteemide arendamise ja/või operatiivjuhtimise eest. Samuti ei võimaldaks see isegi vastutada vabadusel, turvalisusel ja õigusel rajanevas alas toimivate muude süsteemide arendamise ja juhtimise eest. Kui eu-LISAle usaldataks muude poliitikavaldkondade IT-süsteemide ja -lahenduste arendamine ja haldus, peaks juhtimismudelit niisiis märgatavalt arendama.

Puuduvad juhtimismudelid, millele tugineda

Et leida eeskujuks võimalikke juhtimismudeleid, millel tulevase eu-LISA volituste laiendamisega asutatud ELi valdkondadeülese IT-ameti juhtimissüsteem võiks tugineda, vaatles uuringumeeskond erinevaid üksusi ja organisatsioone nii ELi kui ka liikmesriikide tasandil: i) ELi detsentraliseeritud asutusi (peale eu-LISA); ii) Euroopa Komisjoni talitusi, mis osutavad teenuseid mitmele valdkonnale või isegi kõigile poliitikavaldkondadele; iii) ELi institutsioonidevahelisi asutusi, mis osutavad teenuseid ELi institutsioonidele ja asutustele kõigist poliitikavaldkondadest; ja iv) liikmesriikide valdkondadeüleseid IT-ameteid, mis arendavad ja haldavad IT-süsteeme ja -lahendusi, mida kasutatakse erinevates valitsuse institutsioonides.

Analüüsi jaoks tehtud dokumendianalüüs ja konsultatsioonid näitasid aga, et ühelgi neist asutustest ei ole juhtimissüsteemi, mille eeskujul saaks sobivalt ja asjakohaselt luua tulevase ELi valdkondadeülese IT-ameti juhtimismudeli. ELi detsentraliseeritud asutused ei ole sobivad, kuivõrd need on asutatud, et täita väga spetsiifilist või tehnilist ülesannet, mis on seotud kindla poliitikavaldkonna või -sektoriga. Seega ei ole neil volitusi valdkondadeüleste teenuste osutamiseks. Teised analüüsitud asutused ei ole eeskujuks sobivad, sest neil puudub mitmetasandiline juhtimine, mis kaasaks mitmeid asjaosalisi erinevatelt valitsemise tasanditelt (ELi tasand, riiklik, mõnikord ka piirkondlik). Samas on just see ELi detsentraliseeritud asutustele väga omane ja on väga oluline ELi tulevases valdkondadeüleises IT-ametis, mis arendaks ja haldaks üleeuroopalisi süsteeme mitmetest poliitikavaldkondadest.

Hüpoteetilisi juhtimismudeleid saab sõnastada ameti võimalike tulevaste tegevuste ja volituste laiendamise skoobi alusel

Sobivate võrreldavate juhtimismudelite puudumisel nii ELi kui ka liikmesriikide tasandil võib sõnastada mitmeid erinevaid hüpoteetilisi juhtimismudeleid, mis võimaldaksid delegeerida eu-LISAle üleliiduliste poliitikavaldkondade IT-süsteemide ja koostalitluslahenduste arendamise ja operatiivjuhtimise. Selliste hüpoteetiliste juhtimismudelite sõnastamisel tuleb arvestada võimalike ametile antavate uute tegevuste ja laiendatud volituste skoobiga.

eu-LISA volituste laiendamine kõigile ELi poliitikavaldkondadele, nagu enamiku liikmesriikide valdkondadeülestes IT-ametites, ei tundu realistlik. Liikmesriikide valdkondadeüleste IT-ametite analüüsist selgub, et omavahel on pöördvõrdelises suhtes poliitikavaldkondade arv, mille haldamiseks ametil on volitused, ja ameti kaasatus nende valdkondade spetsiifiliste IT-süsteemide haldusse. Mida suuremad on volitused erinevate poliitikavaldkondade või -sektorite teenindamiseks, seda rohkem peavad ametid keskenduma üldiste, interaktiivsete ja taaskasutatavate lahenduste või ehitusplokkide (nt suhtlusinfrastruktuur, sõnumite edastamise ja suhtluse süsteem, turva- ja koostalitlusvõime komponendid, majutusinfrastruktuur, liidesed, platvormid) arendamisele, selle asemel, et vastutada suuremahuliste IT-süsteemide arenduse ja operatiivjuhtimise eest kindlates poliitikavaldkondades või -sektorites. Valdkondadeülene ELi IT-amet, mis teenindaks kõiki ELi poliitikavaldkondi, peaks tõenäoliselt samuti keskenduma üldiste ja interaktiivsete lahenduste pakkumisele ning see ei sobituks kokku eu-LISA põhitegevusvaldkonna ehk ELi sisevaldkonna suuremahuliste IT-süsteemide arendamise ja haldamisega, mida kõigi huvitatud osapoolte (sh Eesti Vabariigi Valitsuse) sõnul ei tohiks mis tahes viisil ohtu seada.

eu-LISA volituste laiendamisel lisaks praegusele rollile tuleks niisiis keskenduda kindlatele poliitikavaldkondadele, millel oleks sisevaldkonnaga selge poliitiline seos ning mille toimimise tõhusust saaks tõsta IT-ressursse ja -pädevusi liites ning ühtse üksusena IT-süsteeme arendades ja hallates.

Analüüsi käigus tuvastati kolm võimalikku lahendust eu-LISA tegevuste või volituste laiendamiseks:

- **1. valik: tegevusi laiendatakse vabadusel, turvalisusel ja õigusel rajaneva ala piires, st laiendatakse õigusvaldkonda** – lisaks ECRIS-TCN-süsteemile ka e-CODEX, detsentraliseeritud süsteem, mida praegu arendab ja haldab rahvusvaheline konsortsium ning mida kasutatakse piiriülestes tsiviil- ja kriminaalasjades, ja ehk ka muud IT-süsteemid, mida arendatakse Euroopa e-õiguskeskkonna tegevuskava raames.
- **2. valik: ameti volitusi laiendatakse piiratult väljapoole vabadusel, turvalisusel ja õigusel rajanevat ala, eeldatavasti tollivaldkonda** (või ka maksuvaldkonda), mis tähendaks, et sünergiaid saaks luua ja tõhusust tõsta ühiste poliitiliste eesmärkide ja operatiivjuhtimisega.
- **3. valik: ameti volituste ulatuslikum laiendamine väljapoole vabadusel, turvalisusel ja õigusel rajanevat ala mitmetesse poliitikavaldkondadesse**, mille hulka võiks kuuluda tolli- (või ka maksu-) ning potentsiaalselt ka digitaalse ühtse turu valdkond, kus on näha ette järgmiste aastate jooksul mitme IT-süsteemi arendamist, mis tõenäoliselt seostuks poliitiliselt siseturvalisuse/sisevaldkonna, õigus- ja tollivaldkonnaga.

Mis tahes tegevuste või volituste laiendamist kaaludes, oleks ameti juhtimismudeli arendamisel kaks põhilist nõuet:

- mudel peaks tagama teatud poliitikavaldkondade või sektorite juhtimiskorralduse eristamise või isegi eraldamise, mis võimaldaks valdkonna eripärasid täielikult arvesse võtta ning nende iseseisvust kaitsta;
- uus mudel peaks olema „horisontaalsem“, st olema korraldatud põhiprotsesside või kategooriate kaupa, mitte lähtuma vertikaalselt konkreetsete IT-süsteemide kaupa jaotumisest, olles seejuures paremini skaleeritav ja kohandatav ning võimaldades süsteeme ja poliitikavaldkondi/sectoreid paremini seostada ja tõhustada.

Muutusi on vaja ameti juhtimisstruktuuri kõigil tasanditel

Nimetatud põhinõuete alusel analüüsis uuringumeeskond kolme eu-LISA juhtimismudeli hüpoteetilise arengu valikut, mis vastasid ameti tegevuste või volituste laiendamise kolmele võimalikule perspektiivile. Kõik valikud mõjutaks ameti juhtimisstruktuuri kolmel tasandil:

- strateegiliste otsuste ja järelevalve tasand, haldusnõukogu (*Management Board*);
- tehniliste oskusteadmiste tasand, alalised nõuanderühmad (*Advisory Groups*);
- nende vaheline kesktasand, mida praegu esindavad ajutised programminõukogud (*Programme Management Boards*) ja mis tegelevad ainult uute arendatavate süsteemidega.

Haldusnõukogu koosseisu ja positsiooni peaks kohandama vastavalt laienevatele volitustele. See nõuaks võimalikult suures ulatuses vastavate poliitikavaldkondade huvitatud osapoolte kaasamist ameti haldusnõukogusse, et tagada nende sõnaõigus ameti strateegiliste otsuste tegemisel. Lisaks tuleks kaaluda väikese tegevusnõukogu (*Executive Board*) loomist, et ameti juhtimine oleks volituste laienedes endiselt tõhus ja tulemuslik. Haldusnõukogu poolt ametisse määratud tegevusnõukogu liikmete arv oleks piiratud ning see keskenduks koostöös ameti personali ja nõuanderühmadega ameti halduse ja eelarve järelevalvele. See võimaldaks ühtlasi haldusnõukogul endal keskenduda vaid strateegiliste otsuste tegemisele ning anda vastutus järelevalve eest üle tegevusnõukogule.

Kõigi kolme eu-LISA tegevuse laiendamise valiku korral on **soovitav tugevdada haldusnõukogu ja nõuanderühmade vahelist kesktaset**, mis on loodud alles hiljuti, kuid mis on juba osutunud ameti juhtimisstruktuuris väga oluliseks ja väärtuslikuks. Seda saaks teha, kui institutsionaliseerida kesktase ameti asutamismääruses juhtimisstruktuuri alalise osana ning laiendada selle rolli ja vastutusvaldkondi. See võimaldaks asendada praegused ajutised **programminõukogud alaliste „juhtkomisjonidega“ igas ameti tegevusalasse kuulavas poliitikavaldkonnas.**

Juhtkomisjonid vastutaks nii uute süsteemide arendamisel programmijuhtimise eest kui ka annaks strateegilist nõu kõigi oma poliitikavaldkonna IT-süsteemide kohta, mis on ameti juhtimise alla usaldatud. Sellised komisjonid oleksid võtmetähtsusega juhtorganid sektoripõhise ekspertiisi pakkumisel ning tagaksid horisontaalse juhtimise enda poliitikavaldkonna IT-valdkonna üleselt, samuti poliitikavaldkondade üleselt. Sellised juhtorganid tagaks huvitatud osapoolte huvide arvesse võtmise süsteemide arendamise etapis, samuti tagaks, et arendatud süsteemid sobituks valdkonna ja ameti tervikliku IT olustikuga.

Lisaks võiks kaaluda ka IT-süsteemipõhiste alaliste nõuanderühmade asendamist mitmekülgsete nõuanderühmadega, mis keskenduks üldistele süsteemiagnostilistele (**system-agnostic**) küsimustele. Samuti on otstarbekas kaaluda ajutiste vajaduspõhiste

ekspertrühmade loomist uute süsteemide arendamisel. See võimaldaks liikuda edasi praeguse vertikaalse IT-süsteemipõhise korralduse juurest horisontaalsema ja paindlikuma protsessist lähtuva tehnilise ekspertiisi pakkumise poole. Taoline areng oleks tõenäoliselt vajalik, kui ameti volitusi laiendatakse mitmetele poliitikavaldkondadele väljapoole vabadusel, turvalisusel ja õigusel rajanevast alast. Samas, kui selleks on eeldused täidetud, saaks lähenemist teoreetiliselt rakendada ka piiratuma volituste laiendamise korral, nagu on kirjeldatud 1. ja 2. valikus. Nii oleks uus juhtimismudel paremini skaleeritav ning ameti tegevust oleks hiljem võimalik veel rohkematesse poliitikavaldkondadesse laiendada.

Ameti eelarvejuhtimine ei peaks märkimisväärselt muutuma

Mis tahes varianti eu-LISA tegevuste laiendamiseks ka ei valita, peaks ameti tegevust jätkuvalt valdavalt rahastama ELi üldeelarve sihtotstarbeta eraldisest. Teoreetiliselt eksisteerib võimalus ka teenusepõhise rahastusmudeli rakendamiseks, mille kohaselt saaks amet ELi iga-aastase rahastuse asemel (või ka lisaks sellele) igalt poliitikavaldkonna „kliendilt“ teenuste eest tasu nõuda. Sellel aga saab olla ameti üldises rahastuses vaid piiratud roll, kuivõrd see läheks vastuollu universaalsuse printsiibiga, mis on üks ELi institutsioonide ja asutuste eelarvejuhtimise põhimõtteid. Samuti oleks sellist mudelit praktiliselt keeruline rakendada laiemas mitmetasandilise juhtimise kontekstis, kus poliitikavaldkondade „kliendid“ võivad tähendada mitmeid huvitatud osapooli erinevatelt territoriaaltasanditelt.

Niisiis võib eeldada, et eu-LISA volituste laiendamisega asutatud valdkondadeülese ELi IT-ameti eelarvejuhtimises ei toimuks erilisi muutusi ameti eelarve praeguse korraldusega võrreldes, isegi sellest hoolimata, kui protsess läheks rohkemate huvitatud osapoolte kõigisse otsustusetappidesse kaasamise tõttu keerukamaks. Seetõttu on võtmetähtsusega kõikide kaasatud poliitikavaldkondade aus ja sobiv esindatus ameti juhtorganites, et tagada kõigi ameti poolt teenindatavate poliitikavaldkondade puhul piisav kindlus valdkonna projektide ja süsteemide jaoks rahastuse tagamisel.

Eelistatavalt tuleks eu-LISA tegevuste ulatust laiendada sammhaaval

eu-LISA tegevuste või volituste laiendamise perspektiividel tuginevad valdkondadeülese ELi IT-ameti hüpoteetilised juhtimismudelite valikud ei ole olemuslikult mitte teineteise alternatiivid, vaid võimalus ameti volituste järjepidevaks laiendamiseks. Neid võib pidada ameti tegevuste erinevatesse poliitikavaldkondadesse laiendamise võimalikeks järjestikusteks etappideks. Selleks, et eu-LISA volituste hüpoteetiline laiendamine oleks edukas, tuleks tõenäoliselt isegi eelistada etapiviisilist lähenemist, kuivõrd see annaks ametile võimaluse enda usaldusväärsust poliitikavaldkondades järk-järgult tõestada ning oma tegevust uutesse ja teineteist toetavatesse valdkondadesse laiendada vaid siis, kui see on operatiivselt ja poliitiliselt realistlik.

Arvestades hetkeseisu ja ameti juba niigi suurt töökoormust järgnevatel aastatel, on 1. valik (tegevuste laiendamine õigusvaldkonda) tõenäoliselt ainus, mida saaks lühikeses või keskmises perspektiivis mõistlikult rakendada. Teatud määral on eu-LISA tegevuste laiendamine õigusvaldkonda juba alanud ECRIS-TCN-süsteemi arendamise ja võimaliku eesootava e-CODEXi halduse ülevõtmisega.

2. valik (volituste laiendamine tolli IT-süsteemidesse) ja 3. valik (volituste laiendamine mitmele poliitikavaldkonnale/sectorile) on praeguses faasis pikaajalisemad eesmärgid, kuna esiteks peab eu-LISA tõendama enda võimekust sisevaldkonna uusi tähtsaid IT-süsteeme

(EES ja ETIAS) ja koostalitluselemente rajada ja hallata ning tulema edukalt toime tegevuste laiendamisega õigusvaldkonda.

Poliitilised olud võivad aga olenemata eeltoodust järgmiste aastate jooksul muutuda ning teha eu-LISA volituste laiendamise väljapoole vabadusel, turvalisusel ja õigusel rajanevast alast poliitiliselt võimalikuks ja isegi tungivalt vajalikuks. Sellisel juhul võiks kaaluda mõnede käesolevas valdkondadeülese ELi IT-ameti juhtimismudeli analüüsi 2. ja 3. valikus esitatud elementide rakendamist. Eelkõige saaks kaaluda äriprotsessile orienteeritud alaliste nõuanderühmade loomist IT-süsteemipõhiste asemele, sest sellel oleks oluline roll ameti juhtimismudeli horisontaalsemaks ja paremini skaleeritavaks muutmisel.

Põhilised soovitused

Teostatud analüüsi alusel saab anda järgmised soovitused:

- Analüüsi tulemusi tuleks tutvustada põhilistele huvitatud osapooltele nii ELi tasandil kui ka liikmesriikides ning kaasata vastavad osapooled arutellu, et veelgi edendada strateegilist diskussiooni eu-LISA tuleviku ja üleeuroopaliste IT-süsteemide juhtimise teemaikal. Sealhulgas peaks olema kaasatud ka eu-LISA tegevjuhtkond.
- Edasine töö eu-LISA tulevaste volituste ja juhtimismudeli arendamisega peaks keskenduma ameti tegevuste edukale laiendamisele õigusvaldkonda, rakendades selles analüüsis kirjeldatud 1. valikut. eu-LISA juhtimismudelit tuleb mitmeti kohandada, et ametist saaks IT-teenuste pakkuja kogu vabadusel, turvalisusel ja õigusel rajanevas alas, mitte ainult sisevaldkonnas. Muudatusi saaks teha oodatavalt pärast ametile antavat Euroopa Komisjoni hinnangut, mis valmib 2023. aasta lõpus. Siiski tuleks tõenäoliselt muudatusi teha ja osaliselt rakendada juba varem, et eemaldada viimased takistused enne, kui ametile saab usaldada e-CODEXi halduse ja edasi arendamise.
- Ehkki ameti volituste laiendamine vabadusel, turvalisusel ja õigusel rajanevast alast väljapoole ei tundu lühikeses või keskmises perspektiivis realistlik, tuleks eu-LISAst siiski julgustada asutamismääruse artiklis 41 sätestatud võimalusi kasutama, et arendada koostööd ja luua koostöölepinguid muude poliitikavaldkondadega, millega oleks võimalik luua sünergiaid nii poliitiliselt kui ka tõhustamise vaates. Sellised koostöölepped võivad aidata ametil luua tihedamaid suhteid poliitikavaldkondadega vabadusel, turvalisusel ja õigusel rajanevast alast väljaspool (eriti tollivaldkonnaga) ning see sillutaks teed volituste hilisemale formaalsele laiendamisele.

Executive summary

The European Union (EU) and its Member States are developing and managing an increasing number of trans-European IT systems in many areas. In the digital era, the development and operation of such systems has indeed become an enabler as well as a driver of European integration, and the EU increasingly relies on them for the implementation and delivery of its policies.

In 2011 the EU established a dedicated Agency for the management of certain trans-European IT systems in the area of freedom, security and justice (AFSJ). Called the 'EU Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice' (eu-LISA), this agency has been entrusted with managing several IT systems that constitute the essential instruments making it possible to safeguard the Schengen area and support border management, as well as to implement the EU's asylum and visa policies. Since then, the Agency has been playing a crucial role in ensuring the security of the Member States and of European citizens.

In 2018, eu-LISA's mandate was substantially extended. The Agency was entrusted with designing, developing and subsequently managing several new and important systems in the AFSJ, and also with developing components to enable interoperability of large-scale IT systems in the AFSJ. This extended mandate represents a step change for eu-LISA as it involves a significant evolution of its core business, from managing existing and fairly stable systems to designing and developing, with a challenging schedule, brand new systems (EES and ETIAS) that are critical to achieving the EU's policy objectives for the protection of Europe's external borders. In addition, it entails moving for the first time beyond the field of 'Home Affairs' by developing and subsequently managing an IT system for the 'Justice' policy domain (ECRIS-TCN), and hence working with a more diversified set of 'clients' and stakeholders.

The European Commission will evaluate the performance of eu-LISA by the end of 2023, and every five years thereafter. This evaluation will include an examination of the implementation of eu-LISA's establishing Regulation and the way and extent to which the Agency effectively contributed to the operational management of large-scale IT systems and to the establishment of a coordinated, cost-effective and coherent IT environment at Union level in the AFSJ. It will, also, assess the possible need to modify the mandate of the Agency.

In this perspective, the Republic of Estonia, which hosts the eu-LISA headquarters in Tallinn, wishes to assess whether and to what extent eu-LISA could play a broader role in developing and managing information systems and IT solutions for the EU, possibly beyond the AFSJ. The Government Office of Estonia (*Riigikantselei*) has therefore commissioned an analysis of the possibilities that may exist for expanding the current mandate of eu-LISA and changing its governance model to make it possible to delegate in the future to the Agency the operational management and hosting of EU-wide IT systems and interoperability solutions for different policy areas. In other words, the analysis aims to assess whether eu-LISA could potentially be converted into a 'cross-sectoral' EU IT agency, which would be entrusted with developing and managing information systems and IT solutions for the EU in various policy areas, and the evolutions of its governance model that would be required to make that change possible.

Following an open procurement procedure, PwC was commissioned by the Government Office of Estonia to carry out this analysis. The work was performed between November 2019 and April 2020, based on extensive document review (see Appendix 2) and on a

number of stakeholder consultations (see Appendix 3). It included a review and assessment of the current eu-LISA mandate and governance model, as well as an exploration and appraisal of the potential governance model options of a possible future EU cross-sectoral IT Agency established through extending the eu-LISA mandate. The key findings from this analysis are presented below.

eu-LISA's current governance model is insufficiently scalable and needs to evolve

The analysis showed that the current governance model of eu-LISA is, overall, perceived by most consulted stakeholders as being well aligned with the mandate of the Agency as defined by the 2018 establishing Regulation, as supporting effectively the achievement of this mandate, and as having improved significantly in recent years.

However, there is also a perception that the eu-LISA governance model is getting increasingly stretched as the workload of the Agency increases. This results from the transition of the Agency's role from a manager of existing systems to a developer of new ones, and from the fact that its governance structure remains essentially based on vertical 'silos' constituted around the systems which management or development has been entrusted to the Agency.

This silo-based governance model does not appear to be scalable and would probably not enable the Agency to take over responsibility for the development and/or operational management of IT systems beyond the AFSJ – or even to take on responsibility for developing or managing many more systems within the AFSJ. Should eu-LISA be entrusted with the development and management of systems and solutions in other policy areas, this model would therefore need to evolve significantly.

Reference governance models are missing

To identify possible reference governance models applicable for a possible future EU cross-sectoral IT agency that would be established through extending the mandate of eu-LISA, the study team looked at various bodies or organisations at EU level or in the Member States: (i) the EU decentralised agencies (other than eu-LISA); (ii) the European Commission's 'service departments', which supply services to several or even all policy departments; (iii) the EU's interinstitutional bodies, which provide services to the EU institutions and bodies across policy areas; and (iv) the Member States' cross-sectoral IT agencies, which develop and manage IT systems and solutions that are used across government departments.

However, the research and consultations carried out for this analysis have shown that none of these organisations could be considered as providing a suitable and relevant reference model for the governance of a future EU cross-sectoral IT agency. EU decentralised agencies because they have been established to carry out very specific or technical tasks related to specific policy areas/sectors, and hence do not have a cross-sectoral service provision mandate. The other organisations analysed because they are not subject to the kind of 'multi-level governance' involving a multiplicity of actors situated at different territorial levels (EU, national and sometimes sub-national), which is a key characteristic of the governance of the EU's decentralised agencies – and which would be a key requirement for a future EU cross-sectoral IT Agency developing and managing trans-European systems in various policy areas.

Hypothetical governance models may be defined on the basis of the possible future evolutions of the Agency's activities and mandate

In the absence of suitable reference governance models at EU level or in the Member States, a number of hypothetical governance model options may be defined, which could potentially make it possible to delegate in the future to eu-LISA the development and/or operational management of EU-wide IT systems and interoperability solutions for different policy areas. These hypothetical governance models have to be defined according to the scope of the activities and mandate extension that could be considered for the Agency.

An extension of eu-LISA's mandate to all EU policy areas, on the model of most Member States' cross-sectoral IT agencies, does not appear to be a realistic option. The analysis of Member States' cross-sectoral IT agencies indeed suggests that there seems to be a trade-off between the extent of their mandate in terms of policy areas covered and the extent of their involvement in these areas' business-specific IT systems. In fact, the wider their mandate is in terms of policy areas or sectors that are serviced, the more these agencies have to focus on developing sector-independent/agnostic and re-usable solutions or building blocks (e.g. networking and communication infrastructure, messaging and communication system, security and interoperability components, hosting infrastructure, interfaces or platforms, etc.) – as opposed to being given responsibility for the development and operational management of large-scale systems specific to certain policy areas/sectors. A cross-sectoral EU IT agency servicing all EU policy areas would probably have to similarly focus on the provision of sector-independent/agnostic solutions, which would not be compatible with maintaining eu-LISA's core business of developing and managing the EU's essential large-scale IT systems in the field of Home Affairs – a core business that according to all stakeholders, including the Estonian government, should not be put at risk in any way.

Any extension of eu-LISA's activities beyond its current role would therefore have to be focused on specific policy domains or areas, for which clear policy synergies with Home Affairs may exist and operational efficiencies may be achieved by pooling IT resources and competences together and developing and managing systems through a single entity.

Overall, the analysis identified three possible options for extending eu-LISA's activities or mandate:

- **Option 1: a limited extension of its activities within the confines of the AFSJ, meaning an extension to the Justice domain** – not limited to ECRIS-TCN, but also including e-CODEX, a decentralised system developed and currently managed by an international consortium and used in cross-border legal procedures in civil and criminal law, as well as possibly other IT systems that will be developed as part of the European e-Justice Action Programme.
- **Option 2: a limited extension of the Agency's mandate beyond the limits of the AFSJ, meaning presumably to the Customs area** (and possibly also Taxation), with which synergies and efficiencies could be obtained in terms of policy objectives and operational management.
- **Option 3: a broader extension of the Agency's mandate to several policy areas outside of the AFSJ**, which could include the Customs area (and possibly Taxation), and potentially also the Digital Single Market area, where a number of IT systems developments are foreseen for the next few years, with likely policy synergies with the internal security/Home Affairs, Justice and Customs areas.

Whatever the activities or mandate extension considered, there would be two key requirements concerning the evolution of the Agency's governance model:

- The model would need to be capable of ensuring a certain degree of distinction or even separation of governance arrangements by policy area/sector, enabling the specificities of each of them to be fully taken into account, and its independence to be safeguarded.
- The model would need to become more 'horizontal', i.e. organised around business processes or business-related categories rather than around specific IT systems, with a view to becoming more scalable and adaptable, and to effectively deliver synergies and efficiencies between systems as well as between policy areas/sectors.

Evolutions would be needed at all levels of the Agency's governance structure

Based on these key requirements, the study team analysed three options for the hypothetical evolutions of eu-LISA's governance model, corresponding to the three possible options identified for the extension of the Agency's activities or mandate. Each of these options would entail changes impacting the three levels of the Agency's governance structure:

- The strategic decision-making and oversight level, with the Management Board.
- The technical expertise level, with the permanent Advisory Groups.
- In between these two, the intermediate level currently represented by the Programme Management Boards – which are temporary and only deal with new systems under development.

The composition and role of the Management Board would have to be adapted to the expanding mandate. This would require, as much as possible, enlarging its membership to stakeholders from the policy/domains that would be brought into the scope of the Agency's activities, so as to ensure that they can have a say in the strategic decision-making of the Agency. In addition, the creation of a small-sized Executive Board could be considered in order to reinforce the efficiency and effectiveness of the Agency's governance as its mandate widens. This Executive Board would have a limited number of members, appointed by the Management Board, and would focus on supervising the Agency's administrative and budgetary management, in cooperation with the Agency's staff and the Advisory Groups. This would make it possible for the Management Board itself to focus solely on strategic decision-making while delegating supervisory responsibility to the Executive Board.

In all three possible options considered for the extension of eu-LISA's activities, **it would be advisable to strengthen the intermediate level between the Management Board and the Advisory Groups**, which was established recently but has already proven to be a very important and valuable addition to the Agency's governance structure. This could be done by 'institutionalising' this intermediate level in the Agency's establishing Regulation as a permanent element of its governance structure, and also by broadening its role and responsibilities. To this end, the current and temporary **Programme Management Boards could be substituted by a series of permanent 'Steering Committees' for each of the policy domains or areas in scope of the Agency's activities**. These Steering Committees would be in charge of not only performing Programme Management tasks for the development of new systems, but also of providing strategic guidance regarding all IT systems entrusted to the Agency in their respective policy domains/areas. They would be the key governance bodies in charge of providing the essential sector-specific business expertise and of ensuring horizontal governance of the IT landscape in their respective domains as well as across domains. They would ensure that the interests of different

stakeholders can be taken into account in the system development phase, but also that the systems developed can fully fit within the domain's and the Agency's overall IT landscape.

In addition, **the replacement of system-specific permanent Advisory Groups by transversal Advisory Groups focusing on system-agnostic issues could also be considered**, together with the establishment of temporary ad-hoc expert groups whenever needed for the development of new systems. This would make it possible to move beyond the existing silo-based structure and towards a more horizontal and flexible provision of technical expertise. Such evolution would probably be required in case of extending the Agency's mandate to multiple policy areas/sectors beyond the AFSJ, but could also in theory be envisaged in case of a more limited extension as envisaged in Options 1 and 2, should the conditions be met to do so. The resulting governance model would then become more scalable, and would enable further extensions of the Agency's activities to other policy areas at a later stage.

The budgetary management of the Agency would not change significantly

Whatever the option considered for the extension of eu-LISA's activities, the Agency would have to remain mostly financed from the general EU budget through a 'non-assigned' contribution. A service-based financing model, whereby the Agency would charge fees to each of its 'client' policy areas for its services instead of – or in addition to – being granted a yearly contribution from the EU budget, could theoretically be envisaged. However, it could only play a limited role in the overall funding of the Agency as it would run contrary to the principle of universality that constitutes a core budgetary management principle of EU institutions and bodies, and as it would also be practically difficult to implement on a wide scale in a 'multi-level governance' context where 'client' policy areas would involve multiple stakeholders at various territorial levels.

Therefore, the budgetary management of a cross-sectoral EU IT agency established through extending the eu-LISA mandate would not be expected to change significantly from the current practice of the Agency – even if the process would become more complex as more stakeholders would have to be involved in the decision-making at all stages. A fair and appropriate representation of all policy areas serviced by the Agency in its governance bodies would therefore be key to ensure that each of them can get sufficient assurance regarding the allocation of appropriate funding to its projects and systems.

A phased approach to extending eu-LISA's scope of activities should be favoured

Overall, the hypothetical governance model options identified for a cross-sectoral EU IT agency that would be established through extending the activities or mandate of eu-LISA do not really constitute alternatives to each other, but rather a continuum of expansion of the Agency's mandate. They can in fact be considered as constituting the possible various stages of a process of extending the Agency's activities to different policy areas in succession. To ensure that a hypothetical future extension of eu-LISA's mandate can be a success, a phased approach should in fact probably be favoured, whereby the Agency would be given the opportunity to build up its credibility in various policy areas progressively, extending its activities to new and complementary areas only when operationally and politically feasible.

Given the starting point and the already heavy workload of the Agency for the coming years, Option 1 (extension of activities to the Justice domain) is probably the only one that could realistically be implemented in the short-to-medium term. To some extent, the extension of

eu-LISA's activities to the Justice domain is already underway with the development of the ECRIS-TCN system and the possible upcoming take-over of the management of e-CODEX.

Options 2 (extension of mandate to Customs IT systems) and 3 (extension of mandate to multiple policy areas/sectors) remain more distant prospects at this stage, as eu-LISA first has to demonstrate its capacity to successfully deliver and manage a set of new and critical Home Affairs IT systems (i.e. EES, ETIAS) and interoperability components, as well as to successfully manage the extension of its activities to the Justice domain.

Political circumstances may nevertheless evolve in the coming years and make the extension of eu-LISA's mandate beyond the AFSJ more politically viable or even pressing. In this case, some of the elements proposed in this analysis regarding the governance model of a cross-sectoral EU IT agency under Options 2 and 3 could be given consideration. In particular, the establishment of business-oriented permanent Advisory Groups instead of systems-focused ones could potentially be envisaged, as it would play an important role in making the Agency's governance model more horizontal and more scalable.

Key recommendations

Based on the analysis performed, the following recommendations can be formulated:

- The results of this analysis should be presented to key stakeholders at EU level and in the Member States, and discussed with them in order to further advance the strategic reflection about the future of the eu-LISA Agency as well as about the governance of trans-European IT systems. The eu-LISA executive management should also be engaged in this effort.
- Further work on the future mandate and governance model of eu-LISA should focus on ensuring a successful extension of the Agency's activities to the Justice domain, based on the implementation of Option 1 reviewed in this analysis. A number of adaptations to the eu-LISA governance model are indeed needed for the Agency to fully become an IT service provider for the whole of the AFSJ and not just for the Home Affairs domain. These adaptations could be made following the evaluation of the Agency that will be performed by the Commission by the end of 2023, however they would probably need to be partially implemented before that in order to remove the remaining obstacles to the Agency being entrusted with the management and further development of e-CODEX.
- Even if a formal extension of the Agency's mandate beyond the AFSJ does not seem to be a realistic prospect in the short-to-medium term, eu-LISA should nevertheless be encouraged to use the possibilities already offered by Article 41 of its establishing Regulation to develop cooperation and joint working agreements with other policy areas, with which policy synergies and operational efficiencies may be achieved. Such cooperation agreements could help the Agency develop a closer relationship and reach a higher degree of familiarity with policy areas beyond the AFSJ (in particular with the Customs area), which could pave the way to a more formal extension of its mandate at a later stage.

Context and objectives of the analysis

Context

The European Union (EU) is developing and managing an increasing number of IT systems in many areas, and is increasingly relying on those systems for the implementation of its policies.

In particular, more and more “trans-European systems” are established in many areas, which development and management involve both the Commission and the Member States, and which enable trans-European information exchanges. Some trans-European systems support EU policies and exchanges between European public administrations at European and national level, while others are developed and managed by the European Commission to allow for exchanges between the Member States.

In the digital era, the development of these trans-European IT systems has become both an enabler and a driver of European integration. Their successful development and management is becoming increasingly essential to the delivery of the EU’s policies in many areas, and in the attainment of its strategic objectives.

In 2011 the EU established a dedicated Agency for the management of certain trans-European IT systems in the area of freedom, security and justice (AFSJ), called the ‘EU Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice’ (hereafter referred to as eu-LISA or ‘the Agency’). This new entity was entrusted with managing several IT systems that constitute the essential instruments making it possible to safeguard the Schengen area and support border management, as well as to implement the EU’s asylum and visa policies. Since then, eu-LISA has been playing a crucial role in safeguarding the security of the Member States and of European citizens.

In 2015-2016 the European Commission performed an evaluation of eu-LISA, which found that the Agency had effectively ensured the operational management of large-scale IT systems in the AFSJ and fulfilled the tasks laid down in its 2011 establishing Regulation. It also found that eu-LISA had effectively contributed to the establishment of a more coordinated, effective and coherent IT environment for the management of large-scale systems supporting the implementation of EU policies in the AFSJ.

A new establishing Regulation was adopted for eu-LISA in 2018, which substantially extended the Agency’s mandate, and in particular entrusted it with:

- designing, developing and subsequently managing several new and important systems in the AFSJ:
 - an Entry/Exit System (EES), which will electronically register the time and place of entry and exit of third-country nationals (TCNs), and calculate the duration of their authorised stay.
 - a European Travel Information and Authorisation System (ETIAS), which will gather and analyse information on visa-exempt travellers prior to their arrival, in order to determine any irregular migration, security or public-health risks associated with them for the purpose of authorising their travel to the territory of the Member States.
 - a European Criminal Records Information System on Third-Country Nationals (ECRIS-TCN), which will allow Member State's authorities to identify whether

other Member States hold criminal records on TCNs or stateless persons being checked.

- taking on a greater role in research, data quality assurance, pilot projects and testing activities regarding large-scale IT systems in the AFSJ;
- developing the necessary actions to enable interoperability of large-scale IT systems in the AFSJ; and
- providing support to Member States and the Commission in matters related to large-scale IT systems in the AFSJ, including assistance when creating common solutions for the implementation of Member States' obligations stemming from EU legislation on decentralised systems, and ad hoc technical or operational support when dealing with migratory challenges.

This extended mandate represents a step change for eu-LISA, for at least three reasons:

1. it involves a significant evolution of the Agency's core business, from managing existing and fairly stable systems to designing and delivering brand new systems, which implementation is critical to achieving the EU's policy objectives for the protection of Europe's external borders, and which delivery schedule is very ambitious and challenging (the EES is expected to become operational in 2021, and ETIAS in 2022);
2. it involves moving for the first time beyond the field of 'Home Affairs' by developing and subsequently managing an IT system involving the 'Justice' policy domain (ECRIS-TCN), and hence working with a more diversified set of 'clients' and stakeholders;
3. it entails the development of a number of components to enable large-scale IT systems in the AFSJ to interoperate, and hence a move away from the separate development and evolution of systems that mostly prevailed previously.

Article 39 of the new eu-LISA establishing Regulation indicates that the European Commission will evaluate the performance of the Agency in relation to its objectives, mandate, locations and tasks by 12 December 2023, and every five years thereafter. This evaluation will include an examination of the implementation of the Regulation and the way and extent to which the Agency effectively contributed to the operational management of large-scale IT systems and to the establishment of a coordinated, cost-effective and coherent IT environment at Union level in the AFSJ. It will, also, assess the possible need to modify the mandate of the Agency and the financial implications of any such modification.

The process of reviewing an EU agency's performance and amending or replacing its establishing Regulation is a lengthy one, which requires various stakeholders to prepare in advance and to exercise foresight. The Republic of Estonia, which hosts the eu-LISA headquarters in Tallinn, is an important stakeholder in that respect. The Estonian government has provided strong support to the Agency since its founding, and aims to promote and support its further development in the future. In particular, it aims to support the pursuit of eu-LISA's strategic goals to "*Maintain and extend the role of the Agency as an EU ICT centre of excellence and service provider*" and to "*Continue growing as the principal EU ICT hub*"¹. To this end, the Estonian Government wishes to assess whether and to what extent eu-LISA could play a broader role in developing and managing information systems and ICT solutions for the EU, possibly beyond the AFSJ.

¹ eu-LISA Strategy 2018-2022, December 2017

In fact, as more and more trans-European IT systems get established, and as their strategic importance for the delivery of EU policies increases, the need is also growing to ensure a high degree of coherence in the way these systems are designed, developed, and managed, with a view to achieving synergies and efficiencies through the development and adoption wherever possible of common, reusable and flexible solutions. This is needed to contain or reduce costs in terms of development, maintenance, implementation, operation and training at the EU and national level, at a time when public finances remain constrained. This is also needed to avoid a multiplication of solutions, methods, tools and processes that would end up hampering rather than facilitating cooperation between European public administrations.

This need for rationalisation and consistency does not only concern trans-European IT systems themselves, but also the way they are developed and managed, the entities that are involved in that process, and the way these entities are governed.

In this context, the Government Office of Estonia (*Riigikantselei*), which supports the Estonian government in planning and implementing policy and ensuring good governance, has commissioned an analysis of the options that may exist for potentially expanding the mandate of eu-LISA in the future to entrust the Agency with the development and operational management of EU-wide IT systems in various policy areas, and of the adaptations or changes to its governance model that would be needed to successfully pursue such an expanded mandate.

Following an open call for tenders, the Government Office of Estonia selected PwC to perform this analysis, which results are presented in this report.

Objectives

The main objective of this analysis is to describe and assess the possible options for expanding the current mandate of eu-LISA and changing its governance model to make it possible to delegate in the future to the Agency the development and operational management of EU-wide IT systems (including interoperability solutions) for different policy areas.

In other words, the analysis aims to assess whether eu-LISA could potentially be converted into a 'cross-sectoral' EU IT agency, entrusted with developing and managing information systems and ICT solutions for the EU in various policy areas (i.e. beyond the AFSJ), and what evolutions of its governance model would be required to make that change possible.

The results of this analysis are meant to be used by the Government of Estonia in the policy making process concerning the future of the eu-LISA Agency and the governance of IT systems at EU level, including in the negotiations with EU institutions and with other EU Member States with regards to:

- possible evolutions of the eu-LISA mandate, in particular that may result from the European Commission's evaluation of the Agency's performance, due to be conducted by December 2023; and
- the governance of the development and operational management of EU-wide information systems and ICT solutions in other policy areas than the AFSJ.

The following key analysis questions have been defined by the Government Office of Estonia:

1. What kind of governance model would be appropriate for managing a cross-sectoral EU agency, which would enable to take proper account of interests related to specific

policy areas when developing EU-wide IT systems and solutions, and at the same time to achieve synergies between different policy areas?

- 1.1. Are there any reference models either at the EU level or in the Member States for the efficient governance of a cross-sectoral service provider/ ICT competence centre? How do these organisations manage to ensure that the interests and priorities of different stakeholders are taken into account, and synergies between different policy areas achieved?
- 1.2. What kind of alternative solutions exist for the governance model of a cross-sectoral EU agency, and what are their advantages and disadvantages? What would be the best solution based on the analysis of these options? The examination of the following aspects should be included:
 - What changes, if any, would be needed as regards the Management Board of the eu-LISA Agency that would enable it to operate effectively as a cross-sectoral agency? How could the European Commission best represent the interests of different policy areas in the Management Board, taking into account the involvement of several Directorates General?
 - How could the European Commission and the Member States ensure that the interests of different stakeholders are taken into account in the system development phase? What changes, if any, would be needed as regards the role of the Project Management Boards and Advisory Groups for specific IT systems?
 - What changes would the establishment of a cross-sectoral IT agency require in terms of budget management and financing of the projects, based on the service-based financing model?
2. Which legal and other questions would need to be solved additionally in order to transform the current IT agency for the internal security and justice area into a cross-sectoral IT Agency?
 - 2.1. Which legal acts would need to be changed, and to which extent, including recommending a suitable legal basis (or legal bases) for a cross-sectoral IT Agency.
3. What would be the advantages of a cross-sectoral IT agency as regards the provision of services, clients, resources, etc. (for example increase of competence, better possibilities for provision of 24/7 services, economic savings)? What preconditions exist for capitalising on these advantages?
4. What kind of risks could emerge in connection with entrusting additional systems to the agency, and which would be the main risk mitigation measures needed?

Scope

This analysis focuses on the options for expanding the current mandate of eu-LISA and changing its governance model so as to make it possible to delegate in the future to the Agency the development and operational management of EU-wide IT systems (including interoperability solutions) for different policy areas. In other words, it examines the options that may exist for establishing a cross-sectoral EU IT agency through an expansion of the eu-LISA mandate, considering the various conditions that might exist for such expansion to take place and the various elements that may potentially constrain or prevent it.

This analysis does not consider or assess the options that may exist for establishing a cross-sectoral EU IT agency by any other mean than extending the eu-LISA mandate beyond the AFSJ, e.g. by establishing another, separate EU agency or entity.

Ultimately, any decision to extend the eu-LISA mandate to other policy areas than the AFSJ in the future would be political in nature, would involve a multiplicity of stakeholders at EU and national level, and would entail many other dimensions than just the possible gains in terms of the effectiveness of policy delivery and the cost efficiency of IT operations. It is not in scope of this analysis to provide a political assessment or any political advice about the opportunity and means for the EU to extend the eu-LISA mandate to other policy areas/sectors than the AFSJ.

Key concepts and definitions

Governance

'Governance' designates the system of rules, practices, and processes by which an organisation is directed and controlled. It provides the framework for:

- Ensuring that the organisation can take action and make effective, informed and purposeful decisions to attain its objectives, while balancing the interests of its various stakeholders (shareholders, customers, management, employees, government, and the wider community).
- Ensuring appropriate accountability for the decisions made.

An organisation's governance thus typically comprises rules, policies, and controls concerning:

- (1) the distribution of powers and responsibilities within the organisation, as well as of the associated accountability and transparency;
- (2) the procedures for taking into account, balancing and reconciling the sometimes conflicting interests of stakeholders in accordance with their roles and responsibilities; and
- (3) the procedures for ensuring proper supervision and control of decisions and of information-flows, and for taking remedial action if and when needed.

Governance is not and cannot be 'one-size-fits-all', and hence each organisation develops its own specific governance arrangements, which reflect its specific objectives and circumstances and evolve with and according to them over time.

Governance models

A 'governance model' refers to how the various components of an organisation's governance (i.e. policies, systems, and structures, along with the strategic and operational frameworks that enable organisational leadership to take action and make effective decisions with accountability) interface with each other.

In a broad sense, a governance model is therefore the coordinated interaction of various components, and most particularly:

- Decisioning structures, i.e. the structures set up for making decisions in the organisation, as well as for ensuring oversight and accountability, from the strategic level to the operational. Key subcomponents here include organisational design and reporting structure, the role and composition of the governance bodies, their authority and responsibilities, including oversight responsibilities, and management's accountability and authority.

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- Operating procedures, i.e. the processes and protocols established for enacting decisions and managing operations. Key subcomponents here include performance management and incentives, business and operating principles, risk management, and leadership development and talent programmes.
 - Collaboration enablers, i.e. the mechanisms and tools in place to enable information sharing and support joint working between the various governance stakeholders. Key subcomponents here include organisational culture, policies and procedures, reporting and communication, and technology systems and infrastructure.

However, management literature usually tends to define and analyse governance models mostly in relation to an organisation's decisioning structures, and in particular to the role and composition of its board(s) and committees.

Board

The higher governance body of an organisation is usually called the 'board' (Board of Directors, Management Board, Governing Board, Steering Board, etc.). This board represents the membership of the organisation, and is typically responsible for putting in place policies, procedures, values and long-term planning to meet the objectives of the organisation and enable it to achieve its mission.

Overall, management literature usually distinguishes between two main types of boards, 'policy boards' and 'administrative boards', which define two basic types of governance models. **Policy governing boards** develop policy for the organisation and hire an Executive Manager or Director to implement it and report about it, whereas **administrative governing boards** play a more hands-on role in managing the organisation, with the support of expert or advisory committees and staff.

Further, management literature also distinguishes between one-tiered and two-tiered structures of board governance. In the **one-tiered board governance** structure, which is typical of the English-speaking country tradition, the members of a single Board are appointed to both govern and oversee the operations of the organisation. In the **two-tiered board governance structure**, which developed first in Germany and became popular across Europe and some parts of Asia, the governing and control functions are separated. In this structure, the 'management board' handles the long-term strategic planning and decision-making, while another, separate and independent 'supervisory board' is appointed to oversee and control managerial tasks and transactions. By extension, 'two-tiered' can be used to describe any governance model where the board structure and powers are split rather than consolidated into a single board.

Committees

Committees are smaller groups, usually appointed by the board and reporting to it, that focus on specific aspects of the board's responsibilities and that work more closely with the organisation's management. Three types of committees are generally identified:

1. Standing committees, which have specific areas of concern that they monitor, report on and provide advice about to the board on an ongoing basis. Examples of standing committees include: Executive Committee, Personnel Committee, Finance Committee, Nominating Committee, etc. Standing committees usually include one or more board members on the committee, along with staff support.

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2. Ad hoc committees, which are formed by boards for time-limited, specific purposes, and disband when their purpose or goal has been accomplished. One example would be a committee set up to organise a conference or an event.
 3. Advisory committees (also often called advisory groups), which are usually established to provide advice concerning specific, time-limited issues. They may be charged with researching, investigating or monitoring an issue and then providing informed advice to the board. Or they may be established to bring together experts who can provide particular advice on specific matters of interest to the organisation's executive management or the board. Organisations that receive funding to carry out specific tasks and projects often have advisory committees attached to these projects.

In order to function effectively, committees usually need to have: a clear role and purpose, a detailed mandate or terms of reference; an appropriate number of members suited to the role of the committee; a chairperson and clear rules of procedure; a mechanism to report back to the board; and a way to evaluate their work.

The number and type of committees an organisation has is often related to the governance structure it operates under. Some organisations have very few committees, typically when the board focuses strictly on policy and entrusts all operations to the executive management, while others may have several committees playing a very active role in driving the work of the organisation. In many organisations, in fact, a significant share of the decision-making is made or at least prepared in those committees. The work and authority of an organisation's committees, and how its committees communicate and report their efforts to the board and to the executive management, are therefore essential aspects of its governance model.

Overall, an organisation's governance model can thus be primarily analysed on the basis of the roles, responsibilities, composition and functioning of its board and committees, and of the interaction of those with the executive management.

Governance of EU agencies

Multi-level governance

The EU is a political and economic union of 27 Member States that only has a limited number of own competencies (trade, monetary policy, competition policy). Most of its policies are shared responsibilities with the Member States (e.g., environment, border control), or even national responsibilities that are subject to an increasing level of coordination (e.g., national welfare systems, taxation). Hence, in most policy areas political power is spread vertically between many levels of government (EU, national, sub-national), but also horizontally across multiple actors, including not only government bodies but also in some cases quasi-government and non-governmental organisations². This dispersion is reflected in the governance of the EU, its bodies and policies, which is often labelled '**multi-level governance**' as it involves different tiers or levels of government and different types of actors across the Member States.

Effective multi-level governance is a key requirement for the success of the process of European integration and for the successful delivery of EU policies. It is needed to ensure an adequate cooperation and joint working between the different tiers of government across the Member States and to deliver the efficiencies and synergies that are expected from addressing key challenges and pursuing key priorities together rather than separately.

The concept of multi-level governance refers to the decision-making processes that are established for the development and implementation of EU policies, but also to the political structures that are set up for that purpose. Over the last two decades, a wealth of new political structures have been established for implementing various aspects of EU policies in many areas. These have included, in particular, a number of '**decentralised agencies**' created to perform technical, scientific, operational or (semi-) regulatory tasks, sometimes new and sometimes transferred from the European Commission, which help the EU institutions implement policies and take decisions. In fact, '**agencification**' has been one of the main characteristics of the evolution of the EU administration over the last two decades³. This agencification has been motivated, to a significant extent, by the need to ensure that operational and delivery responsibilities that require close vertical and/or horizontal cooperation across the Member States can be subject to effective multi-level governance, in a way that could not be achieved if they were directly exercised by the European Commission.

The decentralised agency delivery model indeed gives a more prominent role to the Member States than implementation by the Commission, as the Member States can then be deeply involved in both the inputs and the outputs of the agencies' work. It thus ensures that responsibility for the activities carried out, the services delivered and the systems developed, can be shared between the EU and the Member States, rather than borne essentially by the Commission.

² Multi-level governance, Edited by Ian Bache & Matthew Flinders, Oxford University Press, April 2004

³ Agencification of the European Union Administration - Connecting the Dots, Morten Egeberg and Jarle Trondal, ARENA Working Paper 3/2016, March 2016

The 2012 ‘Common Approach’

In 2012, following a wave of creation of many new EU agencies, mostly on a case by case basis and without an overall vision of their role and place in the Union’s architecture, the Council of the EU, the European Parliament and the European Commission adopted a ‘Common Approach to the EU’s Decentralised Agencies’⁴, which clarified several key aspects of the agencies’ functioning and governance. The Common Approach sets a number of key rules and requirements concerning, in particular: the creation of agencies, the choice of their seat and headquarters’ arrangements, the performance of regular overall evaluations (every five years) and the introduction of sunset or review clauses foreseeing the option of merging or closing down agencies, ex ante and ex post evaluations of the agencies’ programmes/activities, the development of key performance indicators and of multi-annual programming linked with multiannual resource planning, and a stronger link between the actions performed by the agencies and human and financial resources.

The Common Approach also sets a number of rules and requirements concerning the agencies’ governance, aimed at streamlining their governance structure and clarifying roles and responsibilities. These rules and requirements concern the Management Boards, Directors, and “other internal bodies” (committees), which can therefore be viewed as the essential and mandatory elements of the governance of EU decentralised agencies.

According to the Common Approach, all decentralised EU agencies should be governed by a Management Board, entrusted with supervising the administrative, operational and budgetary management of the agency, while guaranteeing full participation of the Member States and of the Commission. The Common Approach further sets out rules concerning:

- The composition of the Management Board, which shall comprise one representative from each Member State and two representatives from the Commission, plus, where appropriate, one member designated by the European Parliament and a limited number of stakeholders’ representatives.
- The duration of the term of office of Management Board members, which should be four years (renewable).
- The voting rules of the Management Board, which should be absolute majority voting for current business matters, and 2/3 majority for the appointment and dismissal of the agency’s Director, the designation of the chairperson of the Board, and the adoption of the agency’s annual budget and work programme.

The default board governance model of decentralised EU agencies can therefore be described as being a **policy governing board**, developing the agency’s policy and hiring an Executive Manager or Director for implementing it and reporting about it, with a **one-tiered board governance structure**, whereby the Management Board is entrusted with both governing and overseeing the operations of the agency. A key objective of the Common Approach was actually to reinforce the supervisory role of Management Boards in order to counterbalance the powers of the agencies’ directors.

However, the Common Approach also indicates that a two-level (or two-tiered) governance structure can be established to streamline the decision-making process and contribute to enhancing efficiency and effectiveness, and even that it should be set up when this promises

⁴ Joint Statement of the European Parliament, the Council of the EU and the European Commission on decentralised agencies, 12 June 2012

more efficiency. In addition to the Management Board, giving general orientations for the agency's activities, a small-sized Executive Board should then be created, with the presence of a Commission representative, to reinforce the monitoring of the agency's activities and the supervision of its administrative and budgetary management.

This administrative and budgetary management should be entrusted, according to the Common Approach, to a Director appointed by the Management Board on the basis of a shortlist drawn up by the Commission following an open and transparent selection procedure guaranteeing a rigorous evaluation of candidates and a high level of independence. The Director is responsible for the administrative management of the agency, for the implementation of the duties assigned to it, and for developing and maintaining appropriate relationships with the EU institutions and bodies. The Director is in particular in charge of the implementation of work programmes, budgets and decisions taken by the Management Board, and has full management power concerning financial and staff matters. He/she is the legal representative of the agency and is accountable to the Management Board, to which he/she submits an annual report, including accounts, and that may decide to extend his/her mandate once. The Director is also accountable to the European Parliament and the Council for the use of the EU contribution through the annual discharge procedure.

The Common Approach finally sets some rules and principles concerning the “other internal bodies” of decentralised agencies (i.e. scientific committees or advisory groups, and, for agencies with regulatory powers, boards of appeal) – in particular regarding the selection and independence of their members.

It is important to note that the Common Approach is not a binding document, and hence that there may be some margin for an EU agency's setup and governance to depart from its provisions if justified by specific requirements or circumstances. However, it remains an important policy document that sets the key framework conditions for the operation, management and governance of EU agencies, meaning that any departure from its principles and requirements for any existing or new EU agency would need to be thoroughly motivated and justified.

Current eu-LISA mandate and governance model

The EU Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice was established in 2011 by Regulation (EU) No 1077/2011 (the 'establishing Regulation')⁵, and became operational in December 2012.

Its legal basis consists of articles pertaining to Title V - Area of Freedom, Security and Justice of Part Three 'Union Policies and Internal Actions' of the Treaty on the Functioning of the European Union (TFEU), in particular its Chapters 2 (Policies on Border Checks, Asylum and Immigration), 4 (Judicial Cooperation in Criminal Matters) and 5 (Police Cooperation).

The Agency's headquarters is based in Tallinn, Estonia, whilst its operational centre is in Strasbourg, France. It also has a backup/business continuity site in Sankt Johann im Pongau, Austria.

eu-LISA's activities are funded essentially by a subsidy from the general budget of the EU. The Agency also receives contributions from the countries associated with the implementation, application and development of the Schengen acquis, mostly the four European Free Trade Association (EFTA) member states (Iceland, Liechtenstein, Norway, and Switzerland), and voluntary financial contributions from the EU Member States are also possible to finance specific projects. Financial contributions from Member States and third countries are considered as 'assigned revenue' as they shall be used to finance specific items of expenditure.

Mandate

Initial 2011 mandate

The Agency's initial mandate was to be responsible for the operational management of two pre-existing large-scale IT systems:

- The **Schengen Information System (SIS)**, an EU-wide, large-scale information system that stores alerts and provides information on certain categories of wanted or missing persons or objects. Enabling competent national authorities from the Schengen Area Countries⁶, such as the police and border guards, to enter and consult these alerts on persons or objects, the system plays a crucial role in facilitating the free movement of people within the Schengen Area and ensuring a high level of security supporting border controls at the external Schengen borders, as

⁵ Regulation (EU) No 1077/2011 of the European Parliament and of the Council of 25 October 2011 establishing a European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice

⁶ As of 2020 there are 26 Schengen Area countries: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and Switzerland. Bulgaria, Croatia, Cyprus, and Romania, which are not yet part of the Schengen Area but are legally obliged to join it in the future, also take part in the SIS.

well as in law enforcement and judicial cooperation throughout Europe. The SIS was initially created on an inter-governmental basis to maintain security after border controls were relaxed between Schengen countries in 1995, and one Member State (France) was responsible for its operational management. This responsibility was transferred to eu-LISA after its creation, and the Agency has been responsible for the delivery of the system's second generation (SIS II) in 2013 and its operational management since then. SIS II is by far the most widely used information-sharing system for border management and security in Europe, and its use is constantly growing. In 2018, Member States performed on average more than 16.8 million searches per day in SIS II, vs. 14.1 million per day in 2017 and just about 6 million per day in 2014⁷.

- The **Visa Information System (VIS)**, a large-scale information system that collects data and decisions on applications for short-stay visas to visit or transit through the Schengen Area. VIS connects consulates in non-EU countries and all external border-crossing points of Schengen States, allowing them to exchange visa data. The system was established by a Council decision in 2004 and rolled out on a regional basis, starting in October 2011 with North African countries. eu-LISA took over its operational management from the European Commission when becoming operational in December 2012. The system's rollout was then completed at all national consulates in November 2015, and at all official EU border crossing points in February 2016. The VIS is one of the most advanced and large-scale systems of its kind in the world, with over 60 million visa applications and 40 million fingerprint datasets registered as of August 2018. It is expected to contain some 70 million visa applications and biometric records at full capacity.

In 2013 the Agency was further entrusted with the operational management of **Eurodac**, a database containing fingerprint data of asylum applicants and third-country nationals (TCNs) who have crossed the external borders irregularly or who are staying irregularly in a Member State. Eurodac was the first biometrically enabled system commissioned by the EU and the first multinational biometric system in the world. Eurodac has been operating continuously since going live in January 2003, and has undergone many expansions and upgrades. It is used by all EU Member States, as well as by 4 Associated Dublin States (i.e. non-EU countries participating in the Dublin System that establishes uniform criteria for examining asylum applications: Iceland, Norway, Liechtenstein, and Switzerland). The system enables the comparison of fingerprints of asylum applicants and persons apprehended in connection to an irregular or illegal border crossing. A new Eurodac Regulation took effect in July 2015, and national police forces, as well as the EU Agency for Law Enforcement Cooperation (Europol), can now access the system and its fingerprint database for prevention, detection, and investigation of the most severe forms of crime, including terrorism. The fingerprint database was initially designed to contain 1.6 million records in 2003, but its capacity has been expanded several times since then and now reaches 7 million records, all the while ensuring a high degree of accuracy by providing that each fingerprint record is checked in a one-to-many search. In 2018 the Eurodac system processed 879,072 sets of fingerprints⁸.

With the SIS II, VIS and Eurodac, eu-LISA is therefore responsible for managing the essential instruments that make it possible to safeguard the Schengen area and support border management, as well as to implement the EU's asylum and visa policies. Hence, the Agency plays a crucial role in safeguarding the security of the Member States and of European citizens.

⁷ Eu-LISA, Report on the technical functioning of central SIS II 2017-2018, October 2019

⁸ eu-LISA, Eurodac 2018 statistics, February 2019

2018 Mandate extension

In accordance with Article 31 of the 2011 eu-LISA establishing Regulation, the European Commission performed between 2015 and 2017 an evaluation of the action of the Agency to: i) examine the way and the extent to which it effectively contributed to the operational management of large-scale IT systems in the AFSJ and fulfilled its statutory tasks; and ii) assess its role in the context of a Union strategy aimed at a coordinated, cost effective and coherent IT environment at Union level. An external evaluation of the action of the Agency was first commissioned by the Commission, covering the period from December 2012 to September 2015⁹. Building on the findings of this external evaluation, the Commission then prepared, in close consultation with the eu-LISA Management Board, a report on the functioning of the Agency, which was published in June 2017 and issued recommendations regarding changes to the establishing Regulation¹⁰.

Overall, the evaluation found that the Agency had effectively ensured the operational management of large-scale IT systems in the AFSJ and fulfilled the tasks laid down in its 2011 establishing Regulation, as well as new tasks entrusted to it after that. It also found that eu-LISA had effectively contributed to the establishment of a more coordinated, effective and coherent IT environment for the management of large-scale systems supporting the implementation of EU policies in the AFSJ. Regarding the Agency's governance, the Commission's evaluation report found that, overall, eu-LISA had "*established appropriate policies, processes and procedures to govern, structure and organise operations*" and that its "*governance worked in line with the governance provisions in the establishing Regulation and the Rules of procedure*".

Overall, the Commission's evaluation only "*identified the need for limited revision of, or extension of, the tasks entrusted to eu-LISA in the establishing Regulation and other relevant legal instruments*", and governance was not a main focus of the report's recommendations for changes to the establishing Regulation.

However, this evaluation of eu-LISA coincided with the onset of a period of intense and profound evolutions concerning EU policies in the field of home affairs. This entailed the presentation between 2016 and 2018 of a number of new policy initiatives and of legislative proposals including:

- a proposal for the establishment of an Entry/Exit System (EES), i.e. a system registering entry and exit data and refusal of entry data of TCNs crossing the external borders of the Schengen States. which would become the first large-scale IT system actually developed by eu-LISA (April 2016);
- a proposal for a review of the Dublin Regulation ('Dublin IV'), entrusting eu-LISA with the development and operational management of a new automated system ('Dublin Automation System') (May 2016);
- a proposal for a review of the Eurodac Regulation, extending the system's scope and hence impacting the role of eu-LISA (May 2016);

⁹ Independent external evaluation of the European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice – eu-LISA, Final evaluation report March 2016 – Performed by EY

¹⁰ Report from the Commission to the European Parliament and the Council on the functioning of the European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice (eu-LISA), COM(2017) 346 final, 29.6.2017.

- a proposal for the establishment a European Travel Information and Authorisation System (ETIAS), an automated online system for identifying irregular migration, security or public-health risks associated with visa-exempt TCNs travelling to the EU prior to their arrival, to be developed by eu-LISA (November 2016);
- a proposal for a revision of the legal framework of the SIS, broadening its use and preparing the system for its interoperability with other large-scale EU information systems, such as the VIS, Eurodac, ETIAS, and EES (December 2016);
- a proposal for the establishment of a centralised system for the identification of Member States holding conviction information on TCNs and stateless persons to supplement and support the European Criminal Records Information System (ECRIS-TCN system), to be developed and managed by eu-LISA (June 2017).
- a proposal for the establishment of a framework for interoperability between EU information systems in the fields of police and judicial cooperation, and asylum and migration (December 2017), which foresees the design and development, and subsequent technical management by eu-LISA of four key interoperability components:
 - a European search portal (ESP) allowing simultaneous searches in several systems, rather than searching each system individually;
 - a shared biometric matching service (shared BMS) for cross-matching fingerprints and facial images from several systems;
 - a common identity repository (CIR) providing biographical information such as dates of birth and passport numbers for more reliable identification;
 - a Multiple-identity detector (MID), detecting whether a person is registered under multiple identities in different databases.
- A proposal to upgrade the VIS in order to better respond to evolving security and migratory challenges and improve the EU's external border management (May 2018).

All these new developments and initiatives led the Commission to propose, in June 2017, a new establishing Regulation for eu-LISA providing for a substantial extension of the Agency's mandate, and making related adaptations to its governance structure. Following the completion of the legislative procedure, the new establishing Regulation was adopted by the European Parliament and the Council on 14 November 2018¹¹, repealing and replacing the 2011 Regulation, and came into force in December 2018.

The new establishing Regulation makes the Agency responsible for the following new tasks:

- the design, development and operational management of the EES, DubliNet, ETIAS, ECRIS-TCN and the ECRIS reference implementation¹²;
- ensuring data quality of large-scale IT systems in the AFSJ (Article 12);

¹¹ Regulation (EU) 2018/1726 of the European Parliament and of the Council of 14 November 2018 on the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA), and amending Regulation (EC) No 1987/2006 and Council Decision 2007/533/JHA and repealing Regulation (EU) No 1077/2011.

¹² The ECRIS reference implementation (ECRIS RI) represents the Reference Implementation software to exchange data concerning criminal records between Member States.

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- developing the necessary actions to enable interoperability of large-scale IT systems in the AFSJ (Article 13); and
 - providing support to Member States and the Commission in matters related to large-scale IT systems in the AFSJ (Article 16), including assistance when creating common solutions for the implementation of Member States' obligations stemming from EU legislation on decentralised systems, and ad hoc technical or operational support when dealing with migratory challenges.

The new establishing Regulation also gives the Agency a greater role in research, pilot projects and testing activities concerning large-scale IT systems in the AFSJ (Articles 14 and 15). In addition, it broadens the possibility for the Agency to cooperate with EU institutions, bodies, offices and agencies. Article 41 indeed indicates that the Agency shall cooperate with the Commission, with other Union institutions and bodies, offices and agencies, in matters covered by the Regulation, *“in order to achieve, inter alia, coordination and financial savings, to avoid duplication and to promote synergy and complementarity as regards their respective activities”*. This cooperation shall take place within the framework of formal working arrangements, duly authorised by the Management Board, which *“may provide for the sharing of services between agencies, where appropriate, either by proximity of locations or by policy area within the limits of the respective mandates and without prejudice to their core tasks”*. These working arrangements, in addition, *“may establish a mechanism for cost recovery”*. This possibility of establishing formal cooperation arrangements with Union institutions, bodies, offices and agencies primarily targets the AFSJ but is not strictly restricted to it. In principle, eu-LISA can therefore establish working arrangements with EU institutions and bodies active in other policy areas, for example to work on joint pilot projects or interoperability components, whenever policy synergies and operational efficiencies may be achieved.

Reflecting the extension of eu-LISA's mandate, the Agency's budget has been increased massively. The EU contribution, which constitutes the bulk of the Agency's revenues, rose from EUR 67.7 million in 2017 to EUR 204 million in 2019, a 300% growth in just two years. The Agency's staff headcount is also growing significantly, through in a more progressive way. Its number of full-time staff members was 162 at the end of December 2018¹³ (up from 120 when the Agency was established in 2013), and is expected to grow to 263 in 2019, 296 in 2020 and 319 in 2021¹⁴, a 197% increase over four years.

Governance model

The governance model of eu-LISA appears to be quite traditional and fairly similar to that of most EU decentralised agencies.

The Agency's governance structure comprises:

- a **Management Board**, composed of representatives of EU Member States and the European Commission, and in charge of providing the general orientation for the Agency's activities;
- an **Executive Director**; appointed by the Management Board and in charge of the operational and administrative management of the Agency;

¹³ eu-LISA Consolidated Annual Activity Report 2018, 26 June 2019

¹⁴ eu-LISA Programming Document 2019-2021, 31 March 2019

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- a series of **Advisory Groups**, composed of representatives of EU Member States and of the European Commission, and in charge of providing the Management Board with expertise relating to large-scale IT systems.

Evolution of the Agency's governance structure

The governance structure of the Agency formed part of the discussions that led to the adoption of the new eu-LISA establishing Regulation in 2018, and some adaptations were made to the structure that had been established by the 2011 Regulation. These adaptations were aimed at:

- making the Agency's governance fit for its new role of developer of new large-scale IT systems – rather than just operational manager of existing systems;
- incorporating changes derived from the Common Approach on decentralised agencies adopted by the Council, the Parliament and the Commission in 2012.

The main changes and adaptations to the Agency's governance and management structure brought about by the new establishing Regulation are as follows:

- **Concerning the Management Board:**
 - the Management Board was given a series of additional functions, though most of them are a formalisation of pre-existing practices that were not explicitly mentioned in the 2011 Regulation;
 - the term of office of the Management Board members (of 4 years), was made renewable without limit (vs. only one possible renewal in the 2011 Regulation), in order to promote and encourage continuity;
 - the term of office of the Chairperson of the Board, and of the deputy Chairperson, was extended from 2 years to 4 years, there again to favour continuity;
 - the voting rights of the Chairperson – or the Deputy Chairperson when he or she is replacing the Chairperson – were removed, this right being passed to their Member State's alternate member;
 - the attendance of other EU agencies to the meetings of the Management Board was enlarged – in addition to the EU Agency for Law Enforcement Cooperation (Europol) and the EU Agency for Criminal Justice Cooperation (Eurojust), the European Border and Coast Guard Agency (Frontex) and the European Public Prosecutor's Office (EPPO) may now also be invited to attend meetings as observers when specific questions of relevance to them are on the agenda.
- **Concerning the Agency's executive management:**
 - a series of new tasks were assigned to the executive management including the implementation of the Agency's budget, the preparation of the consolidated annual report of its activities, and the application of preventive measures against fraud, corruption or any other illegal activities;
 - the responsibility of the Executive Director to assist the Management Board, and his/her accountability to the Board, were made explicit;
 - the term of office of the Agency's Executive Director (of 5 years) may now be extended once by the Management Board for up to five years, vs. up to 3 years only in the 2011 Regulation;

- the process of selecting the Executive Director and concluding/extending his/her employment contract was reviewed, with a view to make it less burdensome;
- a new function of Deputy Executive Director was created, tasked with assisting the Executive Director.
- **Concerning the Advisory Groups:**
 - new Advisory Groups were created (EES-ETIAS Advisory Group, Interoperability Advisory Group, and ECRIS-TCN Advisory Group);
 - the term of office of the Advisory Group members was extended from three to four years (renewable) to ensure appropriate continuity;
 - participation of other EU agencies in the Advisory Groups was enlarged – as several agencies active in the AFSJ can now appoint representatives to various Groups:
 - Europol: SIS II Advisory Group, VIS Advisory Group, Eurodac Advisory Group, EES/ETIAS Advisory Group, ECRIS-TCN Advisory Group, and Interoperability Advisory Group;
 - Eurojust: SIS II Advisory Group, ECRIS-TCN Advisory Group, and Interoperability Advisory Group;
 - Frontex: SIS II Advisory Group, EES/ETIAS Advisory Group and Interoperability Advisory Group; and
 - EPPO: ECRIS-TCN Advisory Group.

Overall, these changes have been designed to reflect the strengthening and extension of the Agency's mandate, with a view to making it possible for the Agency to successfully manage the transition from an operational manager of existing systems to a developer of new systems, including now in the field of Justice, and to cope with the increasing workload that necessarily comes with it.

However, these evolutions have not fundamentally changed the Agency's governance structure that had been established by the 2011 establishing Regulation, and which remains largely in place today.

Introduction of the Programme Management Boards

A maybe more significant evolution of the Agency's governance model, however, has resulted from evolutions that were not brought about by the new 2018 establishing Regulation, but by the specific Regulations concerning the new tasks of the Agency, namely developing the EES¹⁵, ETIAS¹⁶ and components enabling interoperability between large-

¹⁵ Regulation (EU) 2017/2226 of the European Parliament and of the Council of 30 November 2017 establishing an Entry/Exit System (EES) to register entry and exit data and refusal of entry data of third-country nationals crossing the external borders of the Member States and determining the conditions for access to the EES for law enforcement purposes, and amending the Convention implementing the Schengen Agreement and Regulations (EC) No 767/2008 and (EU) No 1077/2011

¹⁶ Regulation (EU) 2018/1240 of the European Parliament and of the Council of 12 September 2018 establishing a European Travel Information and Authorisation System (ETIAS) and amending Regulations (EU) No 1077/2011, (EU) No 515/2014, (EU) 2016/399, (EU) 2016/1624 and (EU) 2017/2226

scale IT Systems¹⁷. To steer these developments, these Regulations have indeed established new dedicated bodies called 'Programme Management Boards' (PMBs).

The PMBs are composed of maximum of 10 members: seven members appointed by eu-LISA's Management Board from among its members or its alternates, the chair of the relevant Advisory Group, a member representing eu-LISA appointed by its Executive Director, and one member appointed by the Commission (for the ETIAS PMB the number of members appointed by eu-LISA's Management Board is reduced to six as one member is appointed by Frontex).

The ECRIS-TCN Regulation¹⁸ also establishes a PMB, which comprises eight members appointed by the Management Board, the Chair of the ECRIS-TCN Advisory Group and one member appointed by the Commission.

These PMBs are tasked with ensuring the adequate management of the design and development phase of the new systems (or interoperability components), and to ensure consistency, where relevant, between the developments carried out at EU level (i.e. by eu-LISA) and the developments carried out by the Member States. They shall meet regularly (at least three times per quarter), and they shall submit written reports to the Management Board every month on the progress of their respective programmes. In turn, the Advisory Groups for the new systems shall report to their respective PMBs after each of their meetings, shall provide the technical expertise to support the tasks of the PMBs and shall follow up on the state of preparation of the Member States.

The PMBs have no decision-making power, nor any mandate to represent the members of eu-LISA's Management Board. Nevertheless, they constitute an important addition to the eu-LISA governance model as they:

- make it possible for the Management Board to delegate some of its work to more compact, less formal specialised groups that are partly composed of its members and that report directly to it;
- introduce an intermediate layer between the Advisory Groups and the Management Board, which can drive the design and development of the new systems and liaise between the technical expertise provided by the Advisory Groups, the strategic decision-making powers of the Management Board, and the operational work carried out by the Agency's staff.

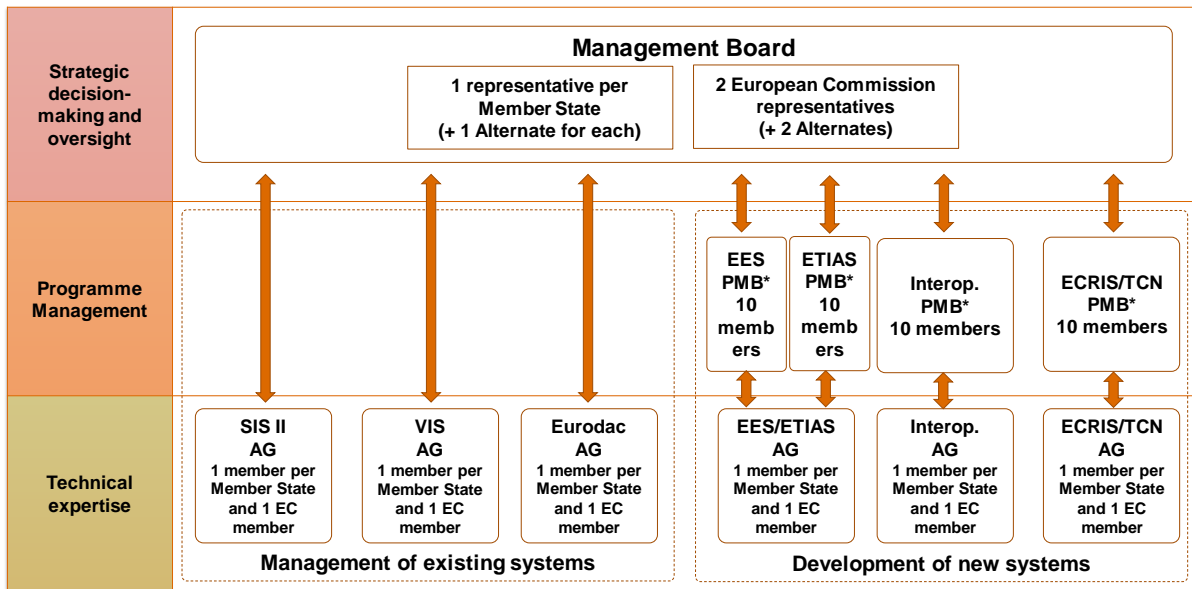
The graph below summarises the current governance structure of eu-LISA, which therefore comprises three levels:

- the strategic decision-making and oversight level, with the Management Board;
- the technical expertise level, with the Advisory Groups; and
- in between these two, the intermediate, Programme Management level for new systems, with the PMBs.

¹⁷ Regulation (EU) 2019/817 of the European Parliament and of the Council of 20 May 2019 on establishing a framework for interoperability between EU information systems in the field of borders and visa and amending Regulations (EC) No 767/2008, (EU) 2016/399, (EU) 2017/2226, (EU) 2018/1240, (EU) 2018/1726 and (EU) 2018/1861 of the European Parliament and of the Council and Council Decisions 2004/512/EC and 2008/633/JHA

Regulation (EU) 2019/818 of the European Parliament and of the Council of 20 May 2019 on establishing a framework for interoperability between EU information systems in the field of police and judicial cooperation, asylum and migration and amending Regulations (EU) 2018/1726, (EU) 2018/1862 and (EU) 2019/816

¹⁸ Regulation (EU) 2019/816 of the European Parliament and of the Council of 17 April 2019 establishing a centralised system for the identification of Member States holding conviction information on third-country nationals and stateless persons (ECRIS-TCN) to supplement the European Criminal Records Information System and amending Regulation (EU) 2018/1726



* Established by specific systems Regulations, not by eu-LISA establishing Regulation

Figure 1 – Current governance structure of eu-LISA

Assessment of current governance model

Overall, the consultations conducted for this analysis suggest that there seems to be a fairly widespread perception, among the surveyed stakeholders, that the current governance model of eu-LISA is, overall, well aligned with the mandate of the Agency as extended by the 2018 establishing Regulation, and works quite well to support it.

Amongst the consulted members of the eu-LISA Management Board, there also seems to be a perception that the governance and management of the Agency have improved significantly in recent years, and that the support provided to the work of the Management Board by the Agency's Management Board Secretariat is of high quality.

This progress has happened as the role of the Agency was shifting from managing existing systems towards developing new systems and solutions, and maybe a result of this evolution. Even before the extension of the Agency's mandate, however, an important trigger for this progress may have been the success of the 'Smart Borders Pilot' conducted in 2015. This Pilot, which aimed to verify the feasibility of the options identified for the implementation of the 2013 'Smart Borders Package'¹⁹ and to validate the selected concepts for both automated and manual border controls, led the eu-LISA stakeholders to work more cooperatively together and to broaden their perspectives about the role of the Agency. The Pilot was particularly important in the perspective of the discussions on the development of the EES and on the extension of the Agency's mandate.

The role of the European Commission in the Management Board is perceived as being positive and as having become more cooperative with the Member States in recent years. A constructive collaboration seems to exist between the Commission's representatives in the Management Board, the Chairperson of the Management Board and the Agency's Executive

¹⁹ https://ec.europa.eu/home-affairs/what-we-do/policies/borders-and-visas/smart-borders_en

Director, in particular to prepare the Management Board's meetings and to support its decision-making.

However, there is also a perception that the eu-LISA governance model, despite working reasonably well and being aligned with the Agency's mandate, is now getting increasingly stretched as the workload of the Agency increases. As a matter of fact, over a hundred meetings are scheduled in 2020 for the various governance bodies (Management Board, Programme Management Boards and Advisory Groups), meaning about one meeting every three working days on average. To some extent, this increasing workload is inevitable as the Agency transitions to a systems development role, due to the strategic importance of the systems that have to be developed and the challenging schedule that has been set for their delivery. However, this increasing workload is putting pressure on the Agency's governance bodies, which schedule of meetings is becoming more and more intense, as well as on the Agency's staff in charge of supporting the work of the governance bodies and of ensuring that their decisions are properly implemented at operational level.

This pressure results from the fact that the governance structure has remained largely based on vertical 'silos' constituted around the systems which management or development has been entrusted to the Agency. The members of the various eu-LISA Advisory Groups are usually not the same persons, and horizontal or transversal work across Advisory Groups seems to be limited. Even if a single Advisory Group has been constituted for the EES and ETIAS systems, and if the Interoperability Advisory Group is working on developments that are transversal in nature, these two new Advisory Groups are nevertheless composed of different people than the other ones, and hence can be seen as constituting two new silos that have been added besides the pre-existing ones.

The eu-LISA executive management is, in general, supportive of moving towards more transversal and agile ways of working. It has embedded this evolution in the Agency's own organisation, with the eu-LISA 2.0 transformation programme and corporate reorganisation initiated in 2018, and in the transformation of its procurement practices. In 2019 the Agency indeed announced its plan to launch a procurement procedure for 'transversal' services related to engineering aspects for several of the large-scale IT-systems it develops and manages, as well as to interoperability elements, rather than for services related to specific systems.

*"This approach, which will be a new way of procuring for the Agency, aims to create a framework in which several contractors can work together, following common standards and practices, to create and deliver in an interdependent-systems environment. The collaboration between contractors that ensues from having to set clear responsibilities between themselves and agreeing to shared working methodologies will improve the coherence and transparency of the system deliverables. This will permit an improved management of dependencies and access control between the systems. Changing the way in which the Agency procures its technology-related services allows it to better tackle the challenges that derive from a growing, interoperable system landscape."*²⁰

This first eu-LISA 'transversal' procurement procedure is now underway²¹. Its scope includes the provision of design, quality and integration support services, development services, infrastructure services, and test services, for both core business systems and interoperability components:

²⁰ <https://www.eulisa.europa.eu/Newsroom/News/Pages/Transversal-the-new-way-of-procuring-at-eu-LISA.aspx>

²¹ Call for tenders LISA/2019/OP/01: Transversal Engineering Framework (TEF)

The eu-LISA executive management is therefore eager to foster transversal work across the various information systems that the Agency develops and manages, and would also be in favour of making the Agency's governance more transversal or horizontal. To this end, it proposed after the adoption of the new establishing Regulation that the Interoperability Advisory Group be composed of members of the other Advisory Groups. This proposal, however, was not accepted by the Member States.

The members of the Management Board seem to be aware of the limitations of the current silo-based model, and some would be keen, at least in principle, to move towards a different, more horizontal governance model, whereby the Advisory Groups would be established to deal with transversal aspects of the Agency's work rather than with specific systems. However, there remains some resistance in practice to moving away from this silo-based model, as it reflects the situation that prevails in many Member States regarding Home Affairs information systems.

As the workload of eu-LISA increases, the persistence of this silo-based model is putting growing pressure on the Agency's staff, which has to ensure the coordination and support the work of multiple bodies and groups that meet frequently and that sometimes have conflicting priorities. This situation is unlikely to change in the near future, and the establishment in early 2020 of the ECRIS-TCN Advisory Group and Programme Management Board further increases the workload for the Agency's staff.

The setting up starting in 2018 of the Programme Management Boards has made it possible to move towards a slightly more transversal governance of the Agency's work, at least with regards to the development of new systems. These PMBs have been established on a systems basis, and therefore are also a reflection of the silo-based governance structure of the Agency – and in fact the EES and ETIAS systems, which have a single Advisory Group, have separate PMBs. However, in practice they are mostly composed of the same members and therefore make it possible for them to develop a somewhat transversal view of the Agency's ongoing systems development work.

It appears that most of the substantial strategic discussions concerning the development of the new systems is now taking place in the PMBs rather than in the Management Board, which only holds a limited number of meetings per year. This has advantages, as the PMBs probably provide a more appropriate forum for targeted and effective cooperation for the systems development phase. However, this may also have drawbacks as the level of understanding of the new systems' developments probably varies significantly between Member States as a result, those that are most active in the PMBs having access to significantly more – and more detailed – information. This also means that the more transversal view of the Agency's ongoing systems development work remains somewhat confined to a limited number of Member States, i.e. those that are represented and engaged in these PMBs.

Whatever the limits of the current silo-based governance structure, it appears unlikely that this structure may evolve significantly in the short term. For all the stakeholders consulted, the priority for eu-LISA should clearly be on delivering the new systems in the framework of the current mandate and governance model before opening any discussion on the future of the Agency or of its governance structure.

In the next few years the Agency therefore has to keep working on the basis of its current governance arrangements. The ongoing extension of its activities to the field of Justice (with the development of the ECRIS-TCN system, which is due to start in 2020, and with the possible take-over of the management of e-CODEX later on) is going to further increase the

Agency's workload but also to further increase the pressure on its governance model as it brings new stakeholders into the picture:

- At national level, the ministries in charge of Justice will have to be more closely involved in the Agency's activities. It is assumed that the responsibility for representing the Member States will remain with the ministries of Home Affairs/Interior, as is currently the case, but that these ministries of Home Affairs/Interior will be in charge of consulting and coordinating more closely with the ministries of Justice at national level regarding Justice IT systems (as they already do with ministries of Foreign Affairs, in charge of consular and hence visa policies, for matters related to the VIS).
- At EU level, the Commission's Directorate General for Justice and Consumers (DG JUST) is also going to become an increasingly important stakeholder. The Agency is already working with DG JUST, but not yet as extensively as with DG HOME. There is a learning process underway, and over time a trustful relationship is expected to develop. Within the Commission, DG HOME is already coordinating with DG JUST for matters concerning ECRIS-TCN, and intends to increase this coordination in the future. However, DG HOME is expected to remain by far the main 'client' of eu-LISA within the Commission (due to both the size and the criticality of the Home Affairs systems entrusted to the Agency), and hence to remain in charge of nominating the Commission's two members on its Management Board.

As the work of eu-LISA increases and diversifies, several consulted stakeholders have mentioned that it might be necessary to leverage technology to ease the burden on the Agency's governance bodies and on the staff supporting them, and hence to make the current governance arrangements work better in practice. In particular, modern communication tools and platforms could be used to enable the Advisory Groups and the Project Management Boards to hold their meetings virtually rather than physically, and also to enable their members to exchange and interact continuously (e.g. through fora, distribution lists, collaborative platforms) rather than only during scheduled meetings. This could be especially important as the developments of the new systems (EES and ETIAS) are about to enter their critical phase, which is likely to require increasingly rapid and agile decision-making capacity and to further stretch the current silo-based governance structure of the Agency.

There seems to be a widespread perception, among the consulted stakeholders, that the current governance model of eu-LISA, even if it is rather well aligned with its current mandate, would make it difficult for the Agency to take on new responsibilities beyond those already foreseen at this stage, let alone to be entrusted with the development and management of systems in other policy areas than the the AFSJ. This governance model is not being perceived as being really 'scalable', and it would probably need to significantly evolve should a decision be made in the future to delegate to the Agency the development and operational management of EU-wide IT systems for other policy areas.

Given the very heavy and challenging workplan of the Agency for the next few years, there does not seem to be any realistic prospect for any such decision to be made before the new Home Affairs systems have been successfully implemented and the extension of the Agency's work to the Justice domain has been successfully managed. The possible need to modify the mandate of eu-LISA, as well as its governance model, will thus probably only be examined as part of the next evaluation of the performance of the Agency, to be carried out by the European Commission by 12 December 2023.

Governance model options for a cross-sectoral EU IT agency

Search for reference governance models

In order to identify possible reference governance models applicable for a possible future EU cross-sectoral IT agency established through extending the eu-LISA mandate, this analysis looked at various bodies or organisations at EU level or in the Member States, which could potentially provide suitable examples for the effective governance of a cross-sectoral IT agency / service provider / competence centre. In particular, it looked at:

- other **EU decentralised agencies** than eu-LISA, to assess whether any of them would potentially have a cross-sectoral service provision mandate;
- the **European Commission's 'service-providing departments'**, which supply services to several or even all policy areas;
- the **EU's interinstitutional bodies**, which provide services to the EU institutions and bodies across policy areas;
- the **Member States' cross-sectoral IT agencies**, which design, develop and manage IT solutions used across government.

EU decentralised agencies are typically set up to carry out technical and/or regulatory tasks related to specific policy areas. In fact, there is no general legal basis in the EU Treaties to create agencies that could work across policy areas, and EU agencies are therefore established on the basis of relevant Treaty article(s) that concern the specific policy area in which they are meant to operate. The 2012 Common Approach is silent on this aspect, and has not impacted this practice²². In some cases, several European Commission Directorates-General (DGs) are represented in an agency's Management Board, but these are usually part of a same 'family' of DGs, and there is typically always a DG playing a leading role. There is no example of a 'service-providing' EU agency delivering services to multiple policy areas, with the exception maybe of the Translation Centre for the Bodies of the European Union (CdT). The CdT provides translation services to almost all EU institutions and bodies, and hence to all EU policy areas. However, its governance model cannot constitute a suitable reference for a possible cross-sectoral EU IT agency, as its service portfolio is limited to translation services, which do not convey the same level of complexity as the development and operation of mission critical large-scale IT systems, and as its governance arrangements would not be practical for a cross-sectoral EU IT agency. All EU institutions and bodies are indeed represented in its Management Board, which also comprises a representative from each of the Member States. As a result, the CdT has by far the largest Management Board of all EU decentralised agencies, with over 70 members. Such board governance would not be adapted for a cross-sectoral EU IT agency, as the IT domain is by nature complex and fast evolving and requires a leaner governance structure.

²² EU Agencies, Common Approach and Parliamentary Scrutiny - European Implementation Assessment, European Parliamentary Research Service (EPRS), November 2018

The **European Commission's 'service-providing departments'** deliver services to several or even all of the Commission's other departments, including policy departments. These service-providing departments include the Directorate Generals for Budget (DG BUDG), Communication (DG COMM), Informatics (DIGIT), Human Resources and Security (DG HR), European statistics (EUROSTAT), Interpretation (SCIC), Translation (DGT), the Joint Research Centre (JRC) as well 'service departments' such as the Secretariat General (SG), the Legal Service (SJ), the department for Administration and Payment of Individual Entitlements (PMO), the Data Protection Officer (DPO), and the Offices for Infrastructure and Logistics in Brussels (OIB) and in Luxembourg (OIL). These service-providing departments have a cross-sectoral scope as they provide services to multiple EU policy areas. However, as Commission departments, their governance is embedded in the Commission's corporate governance policies and processes, and therefore they are not subject to the kind of 'multi-level governance' involving a multiplicity of actors situated at different territorial levels (EU, national and sometimes sub-national), which is a key characteristic of the governance of the EU's decentralised agencies – and which would be a key requirement for a future EU cross-sectoral IT agency developing and managing trans-European systems in various policy areas. Hence, none of them can be considered as providing a potentially suitable and relevant reference model for an EU cross-sectoral IT agency that would be established by extending the mandate of eu-LISA.

The **EU's interinstitutional bodies** are established to provide services to all EU institutions and bodies. They include the Computer Emergency Response Team (CERT), the European School of Administration, the European Personnel Selection Office (EPSO) and the Publications Office of the European Union (OP). Even if these bodies provide services across multiple policy areas, they also cannot be considered as providing a potentially suitable and relevant reference model for an EU cross-sectoral IT agency that would be established by extending the mandate of eu-LISA. Indeed, each of them provides a limited set of specialised services which cannot compare with the development and management of large-scale IT systems, and none of them is subject to the kind of 'multi-level governance' that would be required for a cross-sectoral EU IT agency.

The **Member States' cross-sectoral IT agencies** could in principle be considered as a more likely source of possible reference governance models. Indeed, the existence of a cross-sectoral government IT agency / service provider / competence centre seems to be the norm in the Member States. Almost all of them have established, at various points in the last couple of decades, specific bodies in charge of designing, developing and implementing IT solutions to be used across central/federal government. In general, the governance of these cross-sectoral IT agencies / service providers / competence centres is entrusted to a Management Board where the various government departments / ministries are represented, and which work is supported by various committees of groups composed of technical experts from the concerned government departments / ministries.

However, none of these agencies / service providers / competence centres is subjected to the same kind of 'multi-level governance' requirement that would apply to an agency / service provider / competence centre established at EU level, whereby the interests of actors situated at different territorial levels would have to be adequately represented and balanced. In fact, all of them essentially work for central government departments and bodies and only seldomly for or with regional or local governments, which are not involved in their governance structures.

Furthermore, even if the scope of Member States' cross-sectoral IT agencies' services varies from country to country, most of them tend to focus on the development and management of sector-independent/agnostic and re-usable solutions or building blocks (e.g. networking and communication infrastructure, messaging and communication system, security and interoperability components, hosting infrastructures, generic interfaces or platforms, etc.) rather than on the development and operational management of large-scale systems specific to certain policy areas/sectors. In most cases the operational management

of large-scale policy-specific systems remains the responsibility of the concerned policy departments, which therefore maintain a significant IT capability. This reflects the requirement for policy-specific IT systems to maintain close proximity to the business and the need to ensure clear political accountability for their implementation and operations, as well as the impossibility for a single cross-sectoral body to provide the depth of sector-specific knowledge expertise required for designing and operating policy-specific systems in many policy areas with very different business requirements and stakeholders.

One possible exception to this is the Austrian Federal Computing Centre (*Bundesrechenzentrum* or BRZ), which not only develops and manages sector-independent/agnostic solutions but also business-specific IT systems for some policy areas (mostly Finance and Justice, but also Education, Agriculture and Labour, Social Affairs and Consumer Protection). The BRZ, however, is not a government agency but a private law, limited liability company (GmbH), established by law and 100% owned by the Austrian state. The company is entrusted with a number of IT-related activities by law, and otherwise provides services to government bodies and entities on a contractual basis, just as a private service provider would do. The difference, however, is that government ministries have the possibility to entrust the company with IT-related work by ordinance, i.e. without going through an open public procurement procedure. In addition, the company provides its services for a fee calculated according to the principle of cost recovery and does not charge value added tax (VAT), as it is exempt by law from all fees, taxes and levies. The BRZ is therefore a cost-competitive service provider that is widely used by most Austrian federal ministries and other government bodies. However, only the Federal Ministry for Digital and Economic Affairs is officially involved in the company's governance as it nominates its Managing Director and the members of its Supervisory Board (a responsibility that the Federal Ministry for Digital and Economic Affairs recently took over from the Federal Ministry of Finance). All other ministries work with the company through specific contractual relationships.

In other Member States, cross-sectoral IT agencies' focus on developing sector-independent/agnostic and re-usable solutions or building blocks, but the responsibility for the development and management of policy-specific systems remains with the respective policy departments. This suggests that there might be a trade-off between the extent of a cross-sectoral IT agency's mandate in terms of policy areas covered and the extent of its possible service portfolio: the wider the mandate is in terms of policy areas or sectors that have to be serviced, the more the service portfolio has to be limited to sector-independent/agnostic solutions.

Overall, it therefore appears that Member States' cross-sectoral IT agencies do not constitute a suitable reference that could possibly serve as a model for designing the governance of a cross-sectoral EU IT agency that would be established through an extension of the mandate of eu-LISA. Not only because none of these agencies is subjected to the kind of 'multi-level governance' requirement that would be a key prerequisite at EU level, but also because their governance model is adapted for the provision of sector-independent/agnostic solutions rather than for the development and management of sector-specific core business IT systems for multiple policy areas. Yet, it has been stressed by all stakeholders consulted, and this is also the position of the Estonian government, that any extension of eu-LISA's mandate to other policy areas should not put at risk, in any way, its core business of developing and managing the EU's essential large-scale IT systems in the field of Home Affairs. A 'broad' extension of its mandate to many or even all EU policy areas, on the basis of the model of cross-sectoral IT agencies that prevails in the Member States, would entail evolving towards the provision of sector-independent/agnostic solutions, components and building blocks to a multiplicity of policy areas, which would conflict with the Agency's role as delegated 'owner' of essential policy-specific systems in the field of Home Affairs.

The establishment of a service provider such as Austria's BRZ instead of a public agency could theoretically help resolve this conflict and reconcile an extensive mandate with an extensive service portfolio, which could include both the development of sector-independent solutions with the development and management of sector-specific IT systems. However, the establishment of a private law, limited liability company is probably not an option at EU level as there is no provision in the Treaties enabling the EU to set up a private law body. In addition, the work of a cross-sectoral EU IT agency could not be developed on the basis of specific contractual relationships with policy areas, as EU policy areas involve a multiplicity of players at EU level and in the 27 Member States.

Therefore, the research and consultations carried out for this analysis have not made it possible to identify suitable reference models at EU level or in the Member States for the effective governance of a cross-sectoral agency / service provider / competence centre, which could be considered as potentially applicable for a possible future EU cross-sectoral IT agency established through extending the mandate of eu-LISA.

Definition of hypothetical governance models

In the absence of relevant reference governance models at EU level or in the Member States, a number of hypothetical governance model options can be defined, which could potentially make it possible to delegate in the future to eu-LISA the development and/or operational management of EU-wide IT systems (including interoperability solutions) for different policy areas.

These hypothetical governance model options have to be built in relation with the kind of responsibilities' extension that could be considered for eu-LISA. There are two main dimensions to consider for defining the hypothetical scope of activities of a future cross-sectoral EU IT agency established through an extension of the mandate of eu-LISA:

- the **sectoral scope** of the agency's activities, i.e. the policy areas/sectors it would have to provide services to; and
- the **technical scope** of the agency's activities, i.e. the kind of technical services it would provide to its 'client' policy areas/sectors.

Sectoral scope of the Agency's activities

Concerning the sectoral scope a future cross-sectoral EU IT agency established through an extension of the mandate of eu-LISA, the analysis of Member States' cross-sectoral IT agencies suggests that a 'broad' extension to many or even all EU policy areas would probably not be possible. Such broad extension would indeed entail a move towards the provision of sector-independent/agnostic solutions, components and building blocks to a multiplicity of policy areas, which would conflict with the Agency's role as delegated 'owner' of essential policy-specific systems in the field of Home Affairs – a role that all stakeholders consulted insist needs to be safeguarded.

Hence, a hypothetical extension of the eu-LISA mandate to policy areas beyond the AFSJ would need to be limited to a set of policy areas only, and possibly implemented in a phased manner. Based on the consultations carried out for this analysis, it appears that the areas concerned would need to be selected on the basis of the following two elements:

- the synergies that could potentially exist with the AFSJ, and most particularly with the Home Affairs domain, in terms of policy objectives;
- the efficiencies that could be achieved by pooling IT resources and competences together and developing and managing systems through a single entity.

In other words, the sectoral scope a future cross-sectoral EU IT agency established through an extension of the mandate of eu-LISA could only cover policy areas or domains where: a) the policy objectives pursued are directly or indirectly related or complementary to those pursued in the Home Affairs domain, and could be better achieved through joint working; and b) IT systems need to be developed or managed collaboratively by the EU and its Member States, for which efficiencies could be achieved by leveraging the experience, expertise and infrastructure of eu-LISA.

Three policy areas or sectors have been investigated and discussed with stakeholders in the course of this analysis:

- the Justice domain, which pertains to the AFSJ, but which has so far remained out of the scope of activities of eu-LISA;
- the Customs area, for which clear policy synergies exist with the internal security/Home Affairs area, especially in the perspective of the development of an integrated management of the EU's borders; and
- the Digital Single Market area, where a number of IT systems developments are foreseen for the next few years, with likely policy synergies with the internal security/Home Affairs, Justice and Customs areas.

These three policy domains/areas, and their potential for being brought into the scope of eu-LISA's activities, are discussed in more details below.

Justice

The first possible extension of eu-LISA's activities would in principle be to the Justice domain, which would not necessarily require a regulatory change as the Justice domain forms part of the AFSJ. The progressive inclusion of the Justice domain into the scope of the Agency's activities is actually already underway, with the development of the ECRIS-TCN system. ERIS-TCN, however, is a system aimed at supporting cooperation in the field of criminal justice, and specifically with regards to third country nationals. Hence, it is closely related to eu-LISA's core business of operating the systems and instruments that support the implementation of the EU's asylum, border management and migration policies.

A probably more significant development would occur if eu-LISA would be given responsibility for the operational management and further development of the e-CODEX system. e-CODEX (e-Justice Communication via Online Data Exchange) is a multilateral system and digital infrastructure that allows the secure and trusted cross-border communication and exchange of digital evidence in the field of justice among the EU Member States. It is used as part of various projects for secure information exchange in cross-border legal procedures in civil and criminal law, or to enhance the access to legal information and means throughout Europe. e-CODEX was developed, and is currently maintained and expanded, by an international consortium of EU Member States, European chambers of legal professionals and other institutions, and it has mostly been and remains

funded by different grants of the European Commission. It is the aim of the e-CODEX consortium to hand the system over to an EU institution or body in the near future, and eu-LISA is being considered as one of the possible options in that respect. No firm decision has yet been made, and no legal proposal on e-CODEX has yet been presented by the European Commission, but eu-LISA has undertaken some preliminary actions to be able to take over the operational management of the system, if decided so. It is understood that a decision is expected to be made by the end of 2020, so the system can be handed over to its new manager by early 2022, when the current EU co-funded system maintenance project comes to an end.

In case the operational management of e-CODEX would be handed over to eu-LISA, this would be a major step-change for the Agency, for several reasons. First, it would be a move away from the development and management of partly centralised systems that the Agency has been entrusted with so far, as e-CODEX is a decentralised system that is based on a technical infrastructure consisting of re-useable modules, which participants in the Member States need to install locally. Second, and most importantly, it would mean that eu-LISA would for the first time venture beyond supporting the EU's asylum, border management and migration policies as e-CODEX supports communications and exchanges in both civil and criminal law and in various legal procedures involving EU citizens. This is probably why the hand-over of the system to eu-LISA, which was already discussed and agreed in principle at Council working group level in 2017, has not yet been confirmed and performed.

For the e-CODEX stakeholders, a key requirement for handing over the management of the system to eu-LISA is to safeguard the principle of the independence of the judiciary, and there seems to be some concern that this principle would not necessarily be sufficiently guaranteed in case e-CODEX were to be managed by eu-LISA alongside systems used for Home Affairs purposes and on the basis of the same governance structure. In addition, the scale of the Justice IT systems entrusted to the Agency would remain rather limited compared with that of its 'core business' Home Affairs systems, which according to some consulted stakeholders could entail the risk of Justice IT systems not being given appropriate attention and consideration by the Agency's governance bodies.

Hence, a key requirement for handing over e-CODEX to eu-LISA seems to be the establishment of a specific set up for the governance of Justice IT systems, distinct from the one existing for Home Affairs systems. This would also probably be a key requirement for the development and management of other IT systems in the field of Justice to be delegated to the Agency at a later stage.

The current EU Justice IT landscape does not comprise many large-scale systems, and is mostly composed of relatively small scale and decentralised systems that are developed on a needs basis and without adopting specific legal instruments. The governance of these systems' development and management is relatively flexible, and mostly involves ad-hoc expert groups assembled and chaired by the Commission and working under the guidance of relevant Council working groups or working parties. This has advantages in terms of flexibility and adaptability, but also drawbacks as in the absence of specific legal instruments the implementation and deployment of these decentralised systems relies on the goodwill of the Member States, which take part in the developments or deploy and use the software developed by the Commission on a voluntary basis.

The EU has however adopted in 2019 an e-Justice Strategy²³ and Action Plan²⁴, which is expected to entail the development of new IT systems in the coming years. These may include some large-scale systems, which would in principle be developed on the basis of specific legal instruments imposing obligations on the EU and the Member States and containing provisions for the governance and sustainability of the projects.

²³ 2019-2023 Strategy on e-Justice, March 2019 2019-2023

²⁴ Action Plan European e-Justice, March 2019

A study is currently being conducted by the European Commission's DG JUST on 'digital criminal justice', which is aimed at assessing the business needs and the possible options for the digitalisation of criminal justice in the EU, with a focus on cross-border aspects. Among other things the study is exploring options for the development and operation of IT systems, including the possible role of eu-LISA in that respect. The study is expected to be completed in the first half of 2020, and may pave the way for the development of large-scale systems to be set up or further developed on the basis of specific legal instruments. These may include: a platform to support the work of Joint Investigation Teams (JITs), which facilitate the coordination of investigations and prosecutions conducted in parallel across several Member States²⁵; a platform for the exchange of electronic evidence between judicial authorities (already under development); and a 'Common Services' platform.

Without presuming of the conclusions of the ongoing 'digital criminal justice' study, it is likely that a possible future role for eu-LISA would be subordinated to the establishment by the Agency of a specific setup for the governance and management of Justice IT systems, aimed at ensuring that Justice stakeholders are in the driving seat when it comes to developing and managing these systems.

Customs

Beyond the Justice domain, the most commonly mentioned policy area for a possible mandate extension of eu-LISA is the Customs area. Unlike with the Justice domain, entrusting the Agency with the development and management of Customs IT systems would require a significant legal change, as the current eu-LISA legal basis is restricted to the AFSJ and does not allow the Agency to take on new responsibilities outside of it. This legal basis is indeed constituted by various articles pertaining to Title V of Part Three of the TFEU, when the Customs Union falls under Title II: Free movement of goods. Any extension of the Agency's mandate to the Customs area would therefore require establishing a new legal basis referring to Treaty articles under both Titles V and II – and also changing the Agency's name.

However, there are clear policy synergies between the Customs and the internal security / Home Affairs areas, and as a matter of fact police and customs officers work closely together in the Member States. An example of how these areas are inter-related is the fact that the illegal trafficking of goods is often one of the main sources of terrorism financing. A move towards integrated border management, covering both persons and goods, would in principle be beneficial for the attainment of the EU policy objectives in Home Affairs as well in Customs matters. In addition, the proposed new Multiannual financial framework (MFF) for 2021-2027 places a lot of emphasis on the achievement of synergies and efficiencies wherever possible, and a pooling of IT resources between the Home Affairs and Customs areas could in principle make some sense in that respect.

The Customs Union is one of the pillars of the EU Single Market, and a number of new IT systems are currently being developed to modernise its functioning. The 2008 e-Customs Decision²⁶, the Modernised Customs Code (MCC)²⁷ and the Union Customs Code (UCC)²⁸

²⁵ <https://www.europol.europa.eu/activities-services/joint-investigation-teams>

²⁶ Decision No 70/2008/EC of the European Parliament and of the Council of 15 January 2008 on a paperless environment for customs and trade

²⁷ Regulation (EC) No 450/2008 of the European Parliament and of the Council of 23 April 2008 laying down the Community Customs Code (Modernised Customs Code)

²⁸ Regulation (EU) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code

paved the way towards these developments and outlined the IT systems required for modernising the Customs Union. These IT systems are developed collaboratively by the European Commission (DG TAXUD) and the Member States, and they comprise both 'Union components' (i.e. EU-level components of the IT systems, consisting in assets – such as hardware, software, network connections – and services to support IT systems that are common to the EU and Member States and financed by the Customs 2020 programme²⁹) and 'non-Union components' (i.e. assets and services developed, implemented and financed at national level). The implementation of the IT systems is governed by a multi-layer decision-making process, involving a number of bodies at EU level and in the Member States. The implementation of these new IT systems for the Customs Union has however suffered a series of delays, so that some of the key systems will not be available at the 2020 deadline set in the UCC³⁰.

To enhance the development and delivery of Customs IT systems, the Council's Working Party on Customs Union adopted at its meeting on 24 October 2017 a series of recommendations³¹, and among other things invited the Commission and the Member States, in cooperation with the relevant stakeholders, *"to explore new approaches to develop and operate future customs IT systems bearing in mind that any consideration of new approaches should be preceded by a more thorough study of the idea, including, inter alia, the scope of a pilot, stakeholders, financing and possible involvement of a permanent structure or shared supplier for IT"*. Since then, a number of consultations have been conducted to explore this option of potentially entrusting the development and operation of Customs IT systems to a dedicated permanent structure or to an IT supplier shared with other policy areas, in particular by the Expert Team on new approaches to develop and operate Customs IT systems (ETCIT), an expert group set up by the Commission and the Member States in 2018. The ETCIT's work has included numerous exchanges with various stakeholders, including eu-LISA and DG HOME, aimed among others at discussing possible ways for eu-LISA to support or get involved in the development of Customs-related pilot projects and IT systems. No firm conclusions have yet been reached on the matter, but the discussions are still ongoing.

The Customs IT systems landscape is significantly different from the Home Affairs one. This landscape appears to be at the same time massive and quite fragmented. DG TAXUD is the second largest IT operator within the Commission, behind only DIGIT. It spends around EUR 80-100M/year on IT, of which approximately 1/4th is used for Taxation systems, and 3/4th for Customs ones. Its IT staff is composed of about 70 Commission officials, piloting about 70 intra-muros consultants and about 700 people working on outsourcing deals. It manages over 120 Customs systems of various sizes. Only a few of these systems are 'large-scale'³², and none has a specific legal basis setting legally binding business specifications and a dedicated budget. Their development and management are financed at EU level from DG TAXUD's operational budget and the Customs 2020 programme, and at national level from Member States' budgets. Also, these systems, even the new ones currently being developed, tend to be less centralised than the Home Affairs systems entrusted to eu-LISA.

The emphasis in the Customs area seems to be less on centralising the systems than on sharing and pooling system components and ensuring interoperability. This is due to the fact

²⁹ Regulation (EU) No 1294/2013 of the European Parliament and of the Council of 11 December 2013 establishing an action programme for customs in the European Union for the period 2014-2020 (Customs 2020) and repealing Decision No 624/2007/EC

³⁰ European Court of Auditors, Special report No 26/2018 "A series of delays in Customs IT systems: what went wrong?", October 2018

³¹ Council Conclusions on the way forward of developing customs IT systems

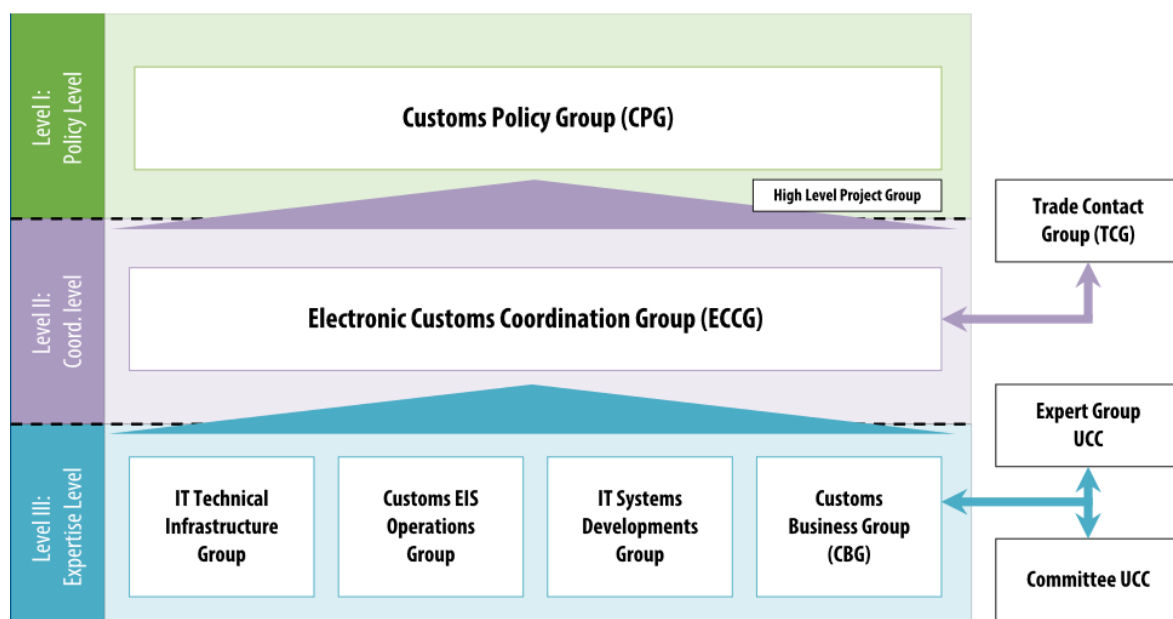
³² The larger-scale European Customs IT systems are decentralised systems, such as the New Computerised Transit System (NCTS), the Export Control System (ECS) and the Import Control System (ICS).

that the business requirements in the Customs area are significantly different, with in particular requirements in terms of volumes and response times for customs clearance that may not be compatible with a high level of system centralisation. Customs IT systems are thus complex, as they consist of numerous national and central components, and as national components are often integrated with systems for revenue collection and calculation and also with VAT Refund systems of tax administrations. The management of Customs IT systems, in particular the larger and most critical ones, is therefore inherently significantly different from the management of eu-LISA's more centralised systems.

In addition, the Customs policy area is intrinsically linked, at EU level as well as in many Member States, with the Taxation policy area, where important IT developments are also under way under the Fiscalis 2020 programme³³, and with which clear synergies and efficiencies are obtained.

Splitting Customs IT systems from Taxation IT systems could therefore be difficult to justify, and a full transfer of both areas' IT systems to eu-LISA would probably be impossible. It is indeed doubtful that eu-LISA would have the critical mass and the full spectrum of expertise needed for a full takeover of Customs and Taxation IT systems, even in a few years' time. A partial transfer limited to the larger-scale Customs IT systems could potentially be envisaged, but it would risk jeopardising the benefits that result from managing Customs IT systems in an integrated way, and Customs and Taxation systems together. Even a transfer limited to systems hosting would be difficult to envisage at this stage as eu-LISA's hosting capacities seem to be inferior to the current hosting capabilities of DG TAXUD, which operates two Tier IV Data Centres, i.e. state-of-the-art infrastructures meeting the highest industry standards in terms of performance and security. Customs IT systems, in addition, have their own controlled, limited and secured infrastructure (common communication network), which differs from the infrastructure used by eu-LISA.

The current governance of Customs IT systems is also significantly different from the eu-LISA model. This governance is quite complex and involves several committees and groups comprising different representatives of the Commission, Member States and trade bodies, as illustrated in the figure below.



³³ Regulation (EU) No 1286/2013 of the European Parliament and of the Council of 11 December 2013 establishing an action programme to improve the operation of taxation systems in the European Union for the period 2014-2020 (Fiscalis 2020) and repealing Decision No 1482/2007/EC

Figure 2 - Governance for implementing the Multi-Annual Strategic Plan and e-Customs projects (source: ECA Special report No 26/2018)

Despite its complexity, this governance framework is considered to be quite mature and to work satisfactorily. A key characteristic of this framework, as illustrated in the figure above, is that it is 'horizontal' (i.e. business process-based), rather than 'vertical' (i.e. system-based) as is the case with eu-LISA. In fact, at the expertise level the permanent groups are established to deal not with individual systems but with transversal aspects: IT technical infrastructure, IT systems operations, IT systems developments, and Business-IT alignment. This 'horizontal' governance framework enables the development of Customs IT systems to be, in general, more agile and flexible than in the case of eu-LISA's Home Affairs systems.

The discussions on business and technical requirements for specific IT systems typically take place in dedicated committees and project groups, which gather representatives from Member States' customs authorities and are chaired by the Commission. In order to act efficiently the project groups and committees usually have detailed mandates and terms of reference that are very specific and time-limited. These mandates are adopted by the Customs Policy Group (CPG), which is composed of the Commission and the Member States' Directors-General of Customs Authorities. Reaching an agreement on individual projects is complex and requires lengthy discussions on technical, operational, legal and financial matters, involving experts from the Commission and the Member States.

The possible exploitation of synergies between Home Affairs and Customs IT systems has been discussed in recent years, in particular with regards to the sharing or joint development of some elements or components, such as interoperability components. A high-level expert group on information systems and interoperability that was established by the Commission in 2016³⁴ to identify and address shortcomings and information gaps caused by the complexity and fragmentation of borders and security information systems at European level called for pursuing increasing interoperability with Customs systems. In its final report³⁵, the group invited the Commission to organise an expert meeting with security, border management and customs experts to assess the options of promoting interoperability across the respective systems, and also to launch a feasibility study to further explore the technical, operational and legal aspects of interoperability between borders and security information systems and customs systems. The Commission subsequently prepared a report on the interoperability of security and border management systems with customs systems, which was submitted to the Council in January 2019³⁶ and identified interoperability needs concerning some specific borders and security information systems and customs systems. This report was only one step in a process, though, as the Commission is now conducting a feasibility study on the topic. This area is therefore a work in progress, and it is too early to assess the potential impact that decisions that may be taken in that respect might have on eu-LISA.

It should be noted, though, that joint working on developing interoperability with Customs IT systems, which would enable eu-LISA to leverage its own work on interoperability components for Home Affairs systems, would not necessarily formally require an extension of the Agency's mandate as it could be done through the establishment of a cooperation agreement with DG TAXUD. Article 41 of the eu-LISA establishing Regulation indeed enables the Agency to establish formal working arrangements with Union institutions,

³⁴ Commission Decision C/2016/3780 of 17 June 2016 setting up the High Level Expert Group on Information Systems and Interoperability

³⁵ High-level expert group on information systems and interoperability, Final report, May 2017

³⁶ 'Assessment report of practitioners' from the Commission services concerning the Interoperability of security and border management systems with customs systems

bodies, offices and agencies, when authorised by the Management Board, which may include a mechanism for cost recovery.

Digital Single Market

Another policy area that was mentioned during the consultation process, where synergies could potentially be achieved with the AFSJ and with the Customs area (and also Taxation), is the Digital Single Market. A number of IT solutions may have to be developed in this area in the next few years in order to establish and manage the systems and infrastructures needed to effectively enable cross-border electronic transactions. In particular, some developments may be required with regards to electronic identification (eID) and electronic Trust Services (eTS), which are central building blocks of the Digital Single Market. In 2014 the EU adopted a Regulation on electronic identification and trust services for electronic transactions in the internal market (eIDAS Regulation)³⁷, which provides a regulatory environment to enable secure and seamless electronic interactions between businesses, citizens and public authorities across the Union.

The eIDAS Regulation aims to ensure that European people and businesses can use their national electronic identification schemes to access public services in other EU countries, and to create a European internal market for eTS (electronic signatures, electronic seals, time stamp, electronic delivery service and website authentication) by ensuring that they work across borders and have the same legal status as traditional paper-based processes.

However, Member States are not yet fully using the opportunities and reaping the benefits potentially arising from the eIDAS Regulation. Only about 15 of them have notified their eID schemes to the European Commission under eIDAS to make it accepted in other countries. Others have pre-notified their schemes, but some still do not provide their citizens with a high level-of-assurance electronic ID. This persistent lack of high-assurance-level eIDs for a significant part of the European population is hampering the use of electronic services across borders. Among other things, this is creating a possible technical bottleneck for the implementation of the 'Single Digital Gateway', which aims to facilitate online access to the information, administrative procedures and assistance services that citizens and businesses need to get active in another EU country, and later on to make it possible to perform a number of procedures in all EU member states without any physical paperwork³⁸.

In addition, the digital solutions developed centrally to allow Member States to take part in the eIDAS cross-border authentication scheme and enable the cross-border use of eIDs, in particular the eIDAS-Node software library, need to be improved and reinforced. The existing solutions are not yet mature enough, and some security flaws have recently been identified in the eIDAS-Node. In order to ensure cross-border usability of Member States eIDs, the building blocks and cross-border eID components (eIDAS-Node, solutions for handling various digital signature formats, etc.) need to be further developed in order to become stable, user-friendly and fully secure. The responsibility for doing so could potentially be entrusted to an agency like eu-LISA, which would then be in charge of establishing and managing a shared yet distributed digital identity network across the EU. This could significantly contribute to the Member States' efforts to develop trustworthy and compatible electronic identity and trust services capabilities in support of the Digital Single Market, and to enhance data security in the EU.

³⁷ Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC

³⁸ https://ec.europa.eu/growth/single-market/single-digital-gateway_en

An extension of the eu-LISA mandate to the development and management of systems in the Digital Single Market area would however require a regulatory change as this area falls under Title I: The Internal Market of Part Three of the TFEU. The revised legal basis for the Agency would need to refer to Treaty articles under both Titles V and I – and also Title II in case the Customs area would also be included in the scope of the Agency’s activities and responsibilities. The Agency’s name would also probably have to be changed.

Technical scope of the Agency's activities

In terms of technical scope, the services delivered to policy areas other than the ASFJ would have to be such that they would not put at risk eu-LISA’s existing core business of developing and managing the EU’s essential large-scale IT systems in the field of Home Affairs. Anything that would risk driving the Agency’s focus away from this core business should therefore be avoided. Hence, these services to other sectors would have to be fairly aligned and compatible with what the Agency currently does in the AFSJ, i.e. developing and/or managing *large-scale* and *trans-European* IT systems, typically established by means of a specific EU Regulation, that are significantly centralised – or partly centralised – at EU level, that are quite stable (or are meant to become quite stable once implemented), for which development and maintenance work can be outsourced to IT services providers under long-term service provision contracts, but that need to be hosted in-house to ensure the appropriate service levels to the system’s users and the required level of security and availability of the data. Developing and managing such systems is where eu-LISA’s experience and know-how lies, which could potentially be valuable to other policy areas/sectors.

It should be noted, in fact, that eu-LISA does not currently manage all – or all types of – EU IT systems in the field of Home Affairs. Even if the European Commission’s DG HOME has not maintained an in-house IT capability after the creation of eu-LISA, it has nevertheless tasked several AFSJ agencies, and not only eu-LISA, with developing and/or managing some trans-European IT systems. For instance, Europol manages a number of trans-European IT systems that support police cooperation in the EU, including:

- the Europol Information System (EIS), which is its central criminal information and intelligence database and contains information on serious international crimes, suspected and convicted persons, criminal structures, and offences and the means used to commit them;
- the Secure Information Exchange Network Application (SIENA), a platform supporting the communication needs of EU law enforcement by enabling the secure, swift and user-friendly exchange of operational and strategic crime-related information.

Overall, the systems developed and managed by Europol are very different in nature to those entrusted to eu-LISA: they are of a smaller scale, they are not as stable as the eu-LISA large-scale systems as they are meant to support a police business that by nature evolves very fast, and their development/maintenance therefore needs to be much more agile and reactive. Contrarily to the eu-LISA model, the development and maintenance of these systems has to be carried out by in-house teams rather than outsourced to IT services providers, while their hosting on the other hand can be outsourced to data hosting providers. The eu-LISA model, hence, would not be adapted to the management of those systems.

Frontex is another AFSJ agency that has a significant IT capability and is tasked with developing and/or managing trans-European IT systems. For instance, Frontex has been

entrusted with developing and managing the European component of the European Border Surveillance System (Eurosur), which is intended to enhance cooperation between Frontex and the Member States to improve their awareness of and responsiveness to the situation at the EU's external borders³⁹. For various reasons the development of Eurosur has suffered from some missed deadlines and delays, which have hindered cooperation between the Member States and the value of the system⁴⁰. However, there does not seem to be any plan for transferring responsibility for the management of Eurosur to eu-LISA. This responsibility will remain with Frontex, which also manages smaller trans-European systems such as the Integrated Return Management Application (IRMA), an information exchange platform initially developed by the IT team of DG JUST and that facilitates the planning, organisation and implementation of irregular migration return and readmission activities.

Hence, eu-LISA only develops and manages *certain types* of trans-European IT systems in the field of Home Affairs. Presumably, a mandate extension to other sectors aimed at capitalising on the Agency's acquired experience and know-how would need to be primarily focused on the provision of similar development and operational management services for trans-European IT systems having similar characteristics, as well as for related interoperability components. This would presumably exclude IT systems supporting the internal work of EU institutions and bodies, as well as trans-European IT systems that are not large-scale or stable enough to fit with the eu-LISA operational model. It would also, presumably, exclude all systems and solutions that are not developed on the basis of a specific legal instrument imposing precise obligations on the EU and the Member States.

Trans-European IT systems that are based on a decentralised architecture, on the other hand, could potentially be entrusted to eu-LISA, even though that would entail an evolution of the Agency's working methods. The possible take-over of the management of e-CODEX in the coming years could constitute a test in that respect, which could enable the Agency to demonstrate its ability to manage decentralised as well as centralised trans-European IT systems and solutions.

Hypothetical governance model options

Any possible decision to extend the eu-LISA mandate to other policy areas/sectors than the AFSJ would be made at political level, and it is not in scope of this analysis to provide any assessment or advice in that respect.

The following observations can however be formulated:

- The current governance model of eu-LISA does not make it possible for the Agency to take over responsibility for the development and/or operational management of IT systems beyond the AFSJ – or even to take on responsibility for developing or managing many more systems within the AFSJ. This governance model, which remains silo-based, is already increasingly stretched and does not appear to be scalable.
- An extension of the Agency's mandate to policy areas beyond the AFSJ remains hypothetical at this stage, as the Agency first has to demonstrate its capacity to successfully deliver and manage the new Home Affairs IT systems (EES, ETIAS) and interoperability components, and also to successfully manage the progressive

³⁹ Regulation (EU) No 1052/2013 of the European Parliament and of the Council of 22 October 2013 establishing the European Border Surveillance System.

⁴⁰ European Court of Auditors, Special report No 20/2019 "EU information systems supporting border control - a strong tool, but more focus needed on timely and complete data", November 2019

extension of its activities to the Justice domain with ECRIS-TCN first, and possibly e-CODEX later on.

- This however does not prevent:
 - The development of some joint working arrangements with other policy areas, in particular the Customs area, to share and leverage the experience acquired by eu-LISA in the AFSJ. These joint working arrangements could address, for instance, issues like interoperability or cybersecurity, for which the Agency could become a centre of excellence at EU level.
 - The evolution of the Agency's governance model, in order to make it potentially fit for a possible formal extension of the Agency's mandate on a longer-term horizon.

Based on the considerations above, it is possible to identify two key requirements for a possible evolution of the Agency's governance model that would aim to make it fit for an extended mandate:

1. For eu-LISA to be entrusted with other policy areas/sectors, the Agency's governance model would need to be capable of ensuring a certain degree of **distinction or even separation of governance arrangements** by sector, enabling the specificities of each policy area/sector to be fully taken into account, and its independence to be safeguarded. This would also be required, in fact, were the Agency to take over wide-ranging responsibilities for the development and management of Justice IT systems – as the Justice domain stakeholders pay particular attention to the independence of the judiciary and to the need to have specific governance arrangements in place for their systems.
2. For eu-LISA to be able to take over the development and/or operational management of IT systems in other policy areas/sectors, the Agency's **governance model would need to become more 'horizontal'**, i.e. organised around business processes or business-related categories rather than around specific IT systems. This would make the Agency's governance model more scalable and adaptable, and would help to effectively deliver synergies and efficiencies between systems as well as between policy areas/sectors.

An evolution of the Agency's governance model on the basis of these two key requirements could pave the way for a possible extension of the Agency's mandate after the evaluation of the Agency's performance due to be performed by 2023, and potentially help lift some of the resistance that such extension would inevitably face.

Any evolution of the Agency's governance model would, in principle, need to be designed in line with the governance rules and requirements established in the 'Common Approach to the EU's Decentralised Agencies' adopted by the Council, the Parliament and the Commission in 2012. This means that the Agency's highest governance body would still be a Management Board, comprising one member per Member State and in principle two representatives from the European Commission. The Management Board could however be extended to include one member designated by the European Parliament, and if appropriate a limited number of stakeholders' representatives. In addition, the Common Approach makes it possible to establish a two-level or two-tiered governance structure by setting up a small-sized Executive Board if needed and appropriate to reinforce the supervision of the Agency's administrative and budgetary management, and to enhance the efficiency and effectiveness of the governance process. In the case of an enlarged mandate, the inclusion of

stakeholders' representatives on the Management Board and the establishment of an Executive Board could become valuable options.

It is however important to note that the Common Approach is a non-binding document, and hence that there may be some margin for departing from its provisions if justified by specific requirements or circumstances. For instance, it would be possible to foresee that the Agency's Management Board would have more than two members from the Commission. This is already the case, for instance, for the European Foundation for the Improvement of Living and Working Conditions (Eurofound), which renewed establishing Regulation⁴¹ establishes that the Management Board should have three members representing the Commission. This actually enables three Commission DGs to be represented on the Eurofound Management Board (DG EMPL, DG SANTE, DG RTD). Other departures from the Common Approach could in principle also be envisaged, though a broad political consensus would probably be needed to adopt them.

Overall, and taking into account these requirements and framework conditions, it is possible to identify three possible evolutions of the eu-LISA governance model, based on the following three types of extensions of its activities or mandate:

1. **A limited extension of the Agency's activities within the confines of the AFSJ**, meaning an extension to the Justice domain not limited to ECRIS-TCN, but also including e-CODEX and possibly later on other IT systems developed as part of the European e-Justice Action Programme.
2. **A limited extension of the Agency's mandate beyond the limits of the AFSJ**, meaning presumably to the Customs area (and possibly also Taxation).
3. **A broader extension of the Agency's mandate to several policy areas outside of the AFSJ**, which could include the Customs area (and possibly also Taxation) as well as the Digital Single Market and others.

On the basis of these three types of extensions of eu-LISA's activities or mandate, a number of evolutions of the Agency's governance model may be envisaged, aimed at ensuring both a greater horizontality of the Agency's governance and a certain degree of segregation of the governance arrangements for the various policy areas/sectors in scope of its activities. These evolutions would concern all three levels of the eu-LISA governance structure, namely:

- the strategic decision-making and oversight level, with the Management Board;
- the technical expertise level, with the permanent Advisory Groups; and
- in between these two, the intermediate level currently represented by the Programme Management Boards.

At present, the intermediate level is only tasked with performing a Programme Management function for the new systems under development, and on a temporary basis (i.e. the PMBs are meant to disband once the developed systems become operational). In case of mandate extension, it would be advisable to strengthen this intermediate level, which has already proven to be a very important and valuable addition to the Agency's governance structure, by first 'institutionalising' it in the Agency's establishing Regulation and second broadening

⁴¹ Regulation (EU) 2019/127 of the European Parliament and of the Council of 16 January 2019 establishing the European Foundation for the improvement of living and working conditions (Eurofound), and repealing Council Regulation (EEC) No 1365/75

its role and responsibilities. This could be achieved by substituting the current and temporary PMBs by a series of permanent 'Steering Committees' in charge of not only performing Programme Management for new developments but also providing strategic guidance for all IT systems in each of the policy areas/sectors in scope of the Agency's activities.

The suggested evolutions to the eu-LISA governance model are further presented hereafter for each of the three types of extensions of the Agency's activities or mandate.

Option 1: extension of activities to the Justice domain

In this first option, the mandate of eu-LISA would not be extended beyond the AFSJ, but the Agency would take increasing responsibility for the development and operational management of trans-European IT systems in the field of Justice, not only ECRIS-TCN and e-CODEX, but also future systems developed as part of the European e-Justice Action Programme.

In this case a key requirement concerning the governance of the Agency would be the establishment of some **distinction or even separation of the governance arrangements** for Justice IT systems from the arrangements in place for Home Affairs IT systems, with a view to ensuring that the specificities of the Justice domain can be properly taken into account at strategic as well as operational level, and the independence of the judiciary guaranteed. To this end, a number of changes to the eu-LISA governance model may be envisaged.

Concerning the Management Board, two possible options could theoretically be envisaged, which could enable the interests of both the Justice and Home Affairs domains to be properly taken into account and represented in the Management Board. The first option would consist in enlarging the Board membership to some stakeholders of the Justice domain, with a view to ensuring that they can have a say in the strategic decision-making of the Agency. These could include a representative of the European Parliament, member of the Committee on Legal Affairs (JURI), which is responsible for legislation in the areas of civil law, commercial law, intellectual property and procedural law. In addition, a couple of representatives of stakeholders from the Justice domain could also join the Management Board (e.g. European chambers of legal professionals), for instance one emanating from the civil law field and one from the criminal law field. This extension of the Management Board would enable the priorities and points of view of the Justice domain to gain more prominence. However, the Management Board would remain numerically dominated by representatives of the Home Affairs domain. As the Agency's core business would remain mostly focused on Home Affairs IT systems, the Member States representatives would indeed probably continue to be nominated by their respective ministries of the Interior/Home Affairs. As Member State representatives on the board of an EU agency represent their Member State and not a given ministry, there would be no way of constraining the Member States to nominate representatives from any specific ministry or government body. However, the Member States could potentially be encouraged to nominate alternate members coming from their ministries of Justice, with whom the titular members would coordinate regularly at national level. Concerning the representatives from the Commission, who similarly represent the Commission as a whole and not any specific DG, it could be envisaged that DG HOME and DG JUST could nominate a member (and an alternate) each. This however would have to be decided by the Commission.

The second possible option would consist in establishing two distinct formations/configurations for the Management Board, one for making decisions concerning Justice systems, and one for making decisions concerning Home Affairs systems. This

would be similar to the EU Council, which meets in 10 different configurations, depending on the policy area(s) being discussed. In the case of eu-LISA, this could in principle be obtained through indicating in the establishing Regulation that the sitting representatives (of the Member States as well as of the Commission) shall have the required knowledge and expertise to discuss the specific domain on the agenda. However, this second option would have the disadvantage of splitting up the Management Board, its work and its responsibility. It would thus divide and possibly dilute accountability for the Agency's strategic decision-making, and potentially prevent a real cross-sectoral strategy from being formulated and implemented. In addition, such division of the Management Board into several formations/configurations would not be in line with the Common Approach on EU Decentralised Agencies, and would therefore be likely to face significant resistance.

A formal separation of the governance arrangements for Justice IT systems from those for Home Affairs IT systems therefore seems to be impractical at the level of the Management Board. It could however take place at a lower level, in the intermediate space currently occupied by the Programme Management Boards established for the new systems under development by their specific legal instruments. It is in these PMBs that most of the substantial discussions about these systems now takes place, and hence there could be some value in 'institutionalising' this intermediate level in the permanent governance structure of the Agency. The PMBs could therefore be replaced by a set of permanent **Steering Committees for each domain** (Home Affairs and Justice), complemented by a Steering Committee for interoperability solutions (possibly composed of members from the two other Steering Committees). These Steering Committees would be in charge of providing strategic guidance for IT systems and solutions in their respective domains, as well as of performing Programme Management tasks for the development of new systems. They would be the governance bodies in charge of providing the essential sector-specific business expertise and of ensuring horizontal governance of the IT landscape in their respective domains and across domains. They would ensure that the interests of different stakeholders can be taken into account in the system development phase, but also that the systems developed can fully fit within the domain's and the Agency's IT landscape. The members of these Steering Committees would include a representative of each Member State and a representative from the Commission, which could not be the Management Board members. Each Steering Committee would meet regularly and frequently, and would regularly report to the Management Board.

At the 'technical expertise level', system-specific Advisory Groups (AGs) would probably have to be kept in place, as each large-scale system under development or management would require the mobilisation of specific expertise. Communication and joint working between these Advisory Groups would nevertheless have to be encouraged to ensure that synergies can be identified and exploited and that the schedule of meetings of these Advisory Groups remains manageable.

The graph below illustrates the governance model that could result from these proposed changes.

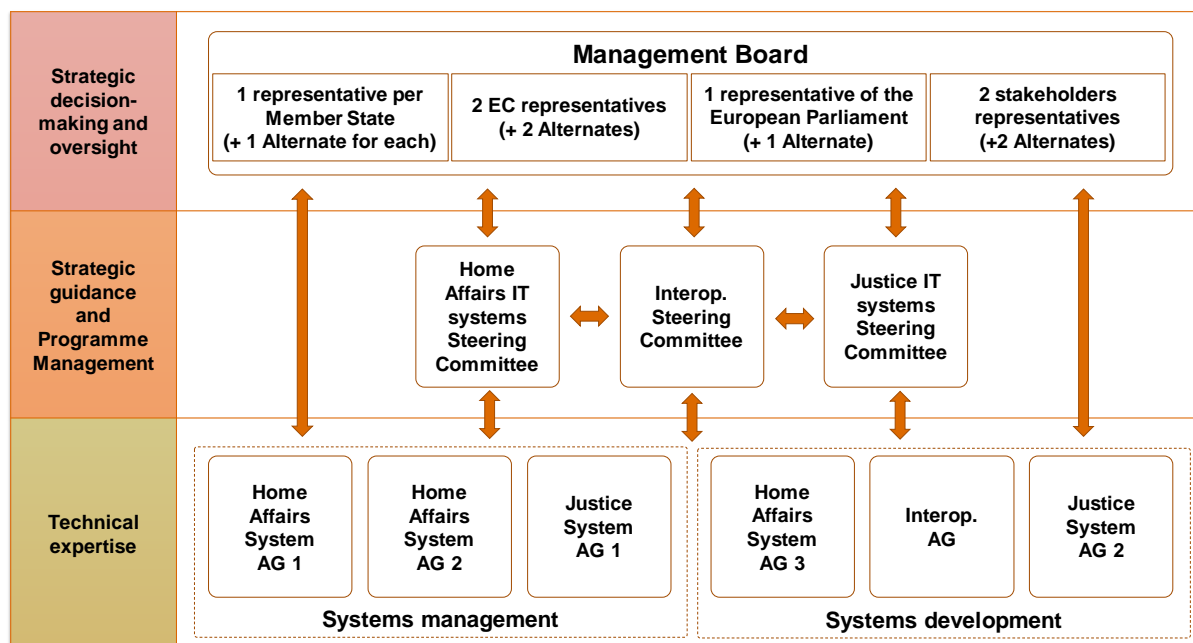


Figure 3 – Hypothetical governance model for extension of activities to the Justice domain

This proposed governance model would ensure both the horizontality of the Agency's governance and a certain degree of segregation of the governance arrangements for Justice IT systems from those in place for Home Affairs IT systems. By so doing, it would potentially contribute to lifting the resistance or reluctance that may still exist among certain Justice domain stakeholders for entrusting Justice IT systems to eu-LISA, and hence it would make it possible for eu-LISA to take a much greater role in the development and operation of those systems.

Option 2: extension of mandate to Customs IT systems

In this second option, the mandate of eu-LISA would be extended beyond the AFSJ to include the area of Customs (and also, possibly, at the same time or at a later stage, the area of Taxation). The Agency would not necessarily take over all EU Customs (and Taxation) IT systems, but could be entrusted with the development and management of some of those systems only, large-scale and established on the basis of a specific legal instrument.

In this case the following evolutions to the Agency's governance model could be envisaged:

- Concerning the Management Board, the setup would remain fairly similar to that proposed in Option 1 above, except that the number of stakeholders' representatives could be increased to 4 (2 for the Justice domain and 2 for the Customs area), plus 4 alternates. In addition, an increase of the number of Commission members to 3 may be considered, which would enable 3 DGs to be represented in the Management Board (DG HOME, DG JUST, DG TAXUD). The decision, however, would belong to the Commission. As the Home Affairs system would most probably continue to constitute the core business of the Agency, the Member States representatives would be expected to continue being nominated by the Ministries of the

Interior/Home Affairs. However, the Member States could potentially be encouraged to nominate alternate members coming from their ministries of Justice or of their Customs Authorities, with whom the titular members would coordinate regularly at national level.

- In addition to the Management Board, and in order to reinforce the efficiency and effectiveness of the Agency's governance as its mandate widens, the creation of a small-sized Executive Board could be considered. This Executive Board would have a limited number of members (maximum 10), appointed by the Management Board, and would focus on supervising the Agency's administrative and budgetary management, in cooperation with the Agency's staff and the Advisory Groups. The Management Board itself would therefore be able to focus on the strategic decision-making.
- At the intermediate level would be established, as in Option 1, separate Steering Committees for the IT systems in the field of Home Affairs, Justice and Customs, complemented by a Steering Committee for interoperability solutions (possibly composed of members from the two other Steering Committees). These Steering Committees would be in charge of providing strategic guidance for IT systems in their domain, as well as of performing Programme Management tasks for the development of new systems. They would be the governance bodies in charge of providing the essential sector-specific business expertise and of ensuring horizontal governance of the IT landscape in their respective domains and across domains. They would ensure that the interests of different stakeholders can be taken into account in the system development phase, but also that the systems developed can fully fit within the domain's and the Agency's IT landscape. The members of these Steering Committees would include a representative of each Member State and a representative from the Commission, which could not be the Management Board members. Each Steering Committee would meet regularly and frequently, and would regularly report to the Management Board.
- At the 'technical expertise level', system-specific Advisory Groups (AGs) would probably again have to be kept in place, provided the number of systems entrusted to the Agency allows it. Each large-scale system under development or management would require the mobilisation of specific expertise. Communication and joint working between these Advisory groups would nevertheless have to be encouraged to ensure that synergies can be identified and exploited and that the schedule of meetings of these Advisory Groups remains manageable.

The graph below illustrates the governance model that could result from these proposed changes.

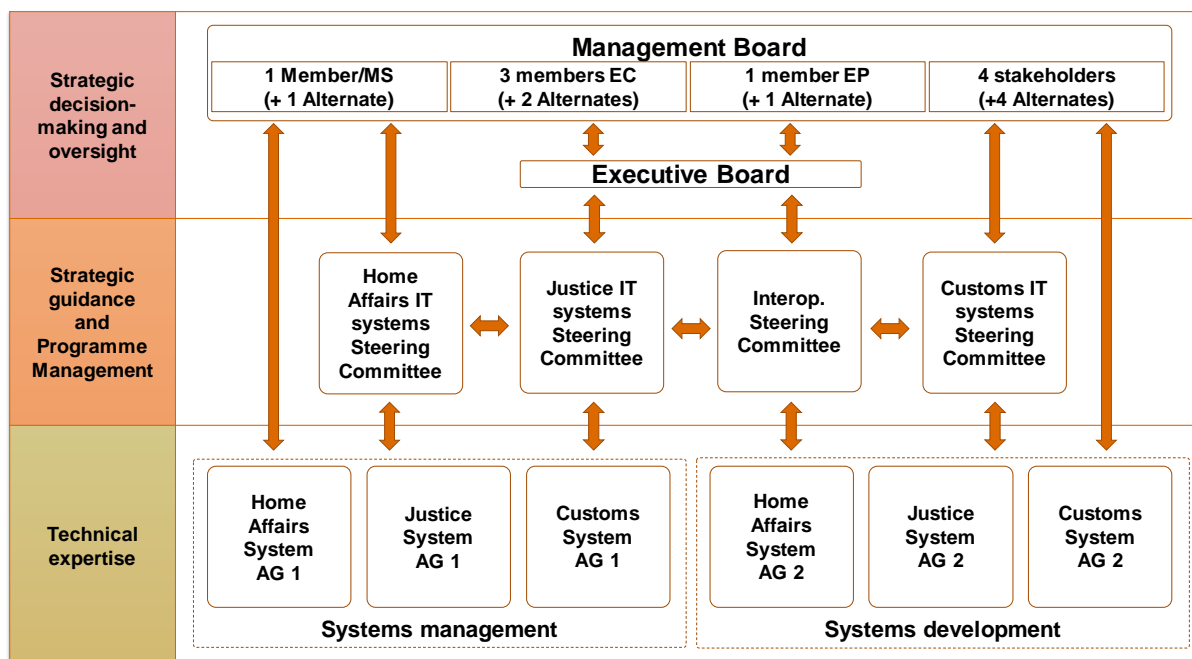


Figure 4 – Hypothetical governance model for extension of mandate to the Customs domain

Option 3: extension of mandate to multiple policy areas/sectors

In this third option, the mandate of eu-LISA would be extended beyond the AFSJ and to more than one or two policy areas/sectors. In this case the following evolutions to the Agency's governance model could be envisaged:

- Concerning the Management Board, the set up could remain fairly similar to that proposed in Option 1 and Option 2 above, except that stakeholders' representatives would probably have to be removed from the Management Board. With multiple policy areas to deal with, the number of stakeholders would indeed probably rapidly become too large for their representatives to contribute effectively to the work of the Management Board. In addition, the number of Commission representatives would probably have to be brought back to 2, as it could not be extended to cover all policy areas in scope of the Agency's activities. In order to ensure that the Commission's representatives can contribute to the Board's decision making concerning systems from multiple policy areas, it could be envisaged that they would be nominated by the Secretariat General, which is in charge of coordinating IT governance within the Commission, and hence has a very wide knowledge and understanding of EU IT systems, and by the Directorate-General for Informatics (DIGIT), which develops and manages IT systems for the Commission's departments, as well as some trans-European systems. Similarly, the Member States could be encouraged to nominate a representative of either their Prime Minister's office or their cross-sectoral IT agency, with a view to ensure appropriate horizontality.
- Similarly to Option 2, a small-sized Executive Board could be established to enhance the supervision of the Agency's administrative and budgetary management, in cooperation with the Agency's staff and the Advisory Groups.
- At the intermediate level, additional Steering Committees would be added for each policy area/sector in which the Agency is active, in order to provide strategic

guidance for IT systems in their domain, and to perform Programme Management tasks concerning the development of new systems. As in Option 1 and Option 2, these Steering Committees would be in charge of providing strategic guidance for IT systems in their domain, as well as of performing Programme Management tasks for the development of new systems. The members of these Steering Committees would include a representative of each Member State and a representative from the Commission, which could not be the Management Board members. Each Steering Committee would meet regularly and frequently, and would regularly report to the Management Board.

- At the ‘technical expertise level’, it would probably not be possible to keep system-specific permanent Advisory Groups in place as with multiple policy areas their numbers would grow too large for their work to remain manageable. They could be replaced by transversal Advisory Groups focusing on system-agnostic issues and on the provision of horizontal technical expertise. As a matter of example, the following Advisory Groups could be set up:
 - An IT systems operational management Advisory Group, providing technical expertise regarding all aspects of the operational management of the various systems entrusted to the Agency.
 - An IT systems design and development Advisory Group, providing technical expertise on the various aspects of the design, development and testing of systems under development.
 - An IT infrastructure Advisory Group, focusing on all aspects and elements of the infrastructure supporting the development and management of the systems entrusted to the Agency, e.g. communication infrastructure, network infrastructure, hosting infrastructure, etc.
 - A Business-IT alignment Advisory Group, focusing on the alignment of IT systems developed and managed with the key business requirements and priorities, and on fostering their ability to deliver of business value.

These proposed transversal/horizontal Advisory Groups are indicative only. Others could be set up instead of those or in addition to them (e.g. focusing on security, or on data quality), depending on the priorities that would be defined by the Management Board.

The graph below illustrates the governance model that could result from these proposed changes.

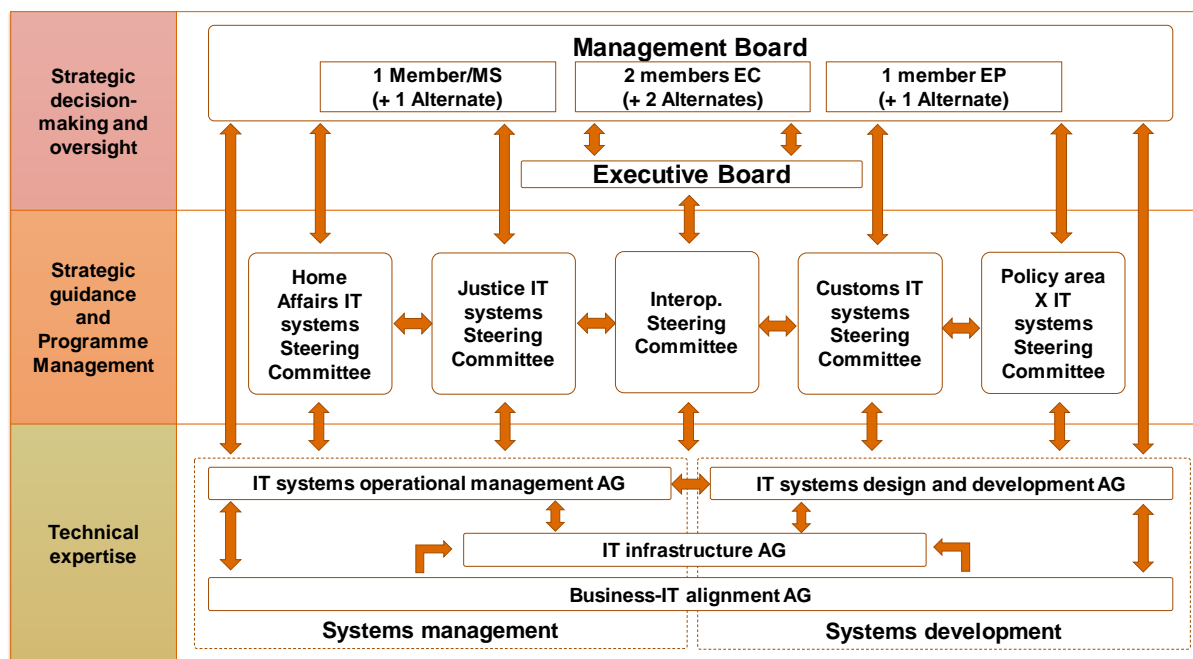


Figure 5 – Hypothetical governance model for extension of mandate to multiple policy areas/sectors

As specific technical expertise would still need to be obtained for the various systems entrusted to the Agency, in particular systems under development, ad-hoc expert groups would probably have to be established on a needs basis. Gathering representatives from Member States' relevant administrations or authorities and chaired by the Commission, these expert groups would work on the basis of detailed mandates and terms of reference adopted by the Management Board, which would be very specific and time-limited. This would enable the Agency to benefit from the technical expertise it would need to develop systems across multiple policy areas, however in a more flexible way than with system-specific permanent Advisory Groups.

Overall, the resulting governance model would be scalable, as it would enable further extensions of the Agency's activities to other policy areas.

It should be noted that the replacement of system-specific permanent Advisory Groups by transversal Advisory Groups focusing on system-agnostic issues, while obtaining specific technical expertise for the development of new systems from temporary ad-hoc expert groups, which would probably be required in case of extension of the Agency's mandate to multiple policy areas/sectors, could also in theory be envisaged in case of a more limited extension as envisaged in Options 1 and 2, should the conditions be met to do so. This would make it possible to move beyond the silo-based provision of technical expertise and towards a more horizontal governance approach.

Budget management and financing of projects

eu-LISA's operating costs are currently covered almost entirely by a contribution from the general budget of the EU, as is the case for most EU decentralised agencies that cannot derive own revenues by charging fees to third parties for their activities or services. Only

agencies with supervisory, surveillance, regulation and registration activities typically have a potential for getting significant funding from sources other than the EU budget⁴².

Regardless of the scope of a possible future extension of eu-LISA's mandate, it is expected that the Agency would remain almost fully financed from the EU budget. Some complementary revenues may be obtained from the charging of user fees for some systems (such as the travel authorisation fees for ETIAS) or from the provision of direct support services by the Agency to the Member States or the Commission (based on Article 16 of the revised establishing Regulation), but these would likely constitute a modest share of the Agency's overall budget.

This means that it would remain the responsibility of the European Commission and of the budgetary authority (shared by the Council and the European Parliament) to allocate the Agency with an annual level of funding that is commensurate with the extent of its mandate and responsibilities. In case these mandate and responsibilities would be extended to several policy areas, the budget allocation would obviously have to increase accordingly to enable the Agency to fulfil its mandate and meet its assigned objectives. The level of the EU budget's contribution to the Agency would have to be negotiated by all concerned parties and stakeholders as part of the budgetary procedure, and this contribution would have to be drawn from appropriate budget lines relevant to the Agency's extended mandate.

As other EU decentralised agencies, eu-LISA is autonomous from the budgetary point of view, meaning that it is responsible for the establishment, implementation and execution of its own budget. The contribution it receives from the general budget of the Union represents 'non-assigned' revenue, meaning that the Agency decides itself how to distribute it between its various activities and the various systems it is entrusted with developing and/or managing. The Executive Director is in charge of preparing the draft annual budget, established on the basis of activity-based budgeting (ABB), and the Management Board is then in charge of adopting the annual budget by a majority of two-thirds of members entitled to vote. The intended distribution of the Agency's budget is of course communicated to the Commission and the budgetary authority as part of the budgetary procedure, but the Agency determines this distribution itself and has some room for accommodating changes during budget execution through 'amending budgets'.

In case of a mandate extension, the contribution from the general budget of the Union to the eu-LISA budget could in principle not be split between the various policy areas in scope of the Agency's mandate. In order to do so this contribution would indeed have to be considered as 'assigned revenue', meant to be used to finance specific items of expenditure. This would run contrary to the principle of universality, which is one of the general principles governing the EU budget, as well as that of eu-LISA⁴³. According to this principle, budget revenue may not be assigned to specific items of expenditure (non-assignment rule) and revenue and expenditure may not be set off against each other (gross budget rule). Consequently, revenue shall in principle be pooled and used without distinction to finance all expenditure, and assigned revenues can only constitute an exception for specific types of revenues.

Therefore, the contribution from the general budget of the Union to the eu-LISA budget would have to remain considered as 'non-assigned revenue'. Its distribution between the different systems entrusted to the Agency, and hence between the various policy areas in scope of its mandate, would have to be decided by the Agency itself. The policy areas in scope of the Agency's activities would have to make sure that the Agency gets granted

⁴² "Potential revenue from the extension of charging fees by EU Agencies", Study requested by the BUDG Committee, European Parliament, September 2018

⁴³ Decision of the Management Board No 2019-198 establishing the Financial Rules of the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA). Entry into force: 01.09.2019

appropriate funding as part of the EU budgetary procedure to develop and manage their systems, yet they would then have to trust the Agency's management and governance bodies to effectively distribute its budget and allocate appropriate funding to their projects. This is a key reason why, in fact, all policy areas concerned would need to be fairly and appropriately represented in the Agency's governance bodies.

In order for all policy areas serviced by the Agency to get increased assurance as to the spending allocated to their projects and systems, an alternative financing model could theoretically be imagined, whereby the Agency would charge fees to each of its 'client' policy areas for its services instead of – or in addition to – being granted a yearly contribution from the EU budget. Such service-based financing model would in principle make sense for a cross-sectoral IT agency acting as a service provider to multiple policy areas, and it is in fact a model that exists in some Member States. The Austrian Federal Computing Centre (BRZ), for instance, charges its 'clients' (government ministries and bodies) for its services, according to the principle of cost recovery.

A service-based financing model could in principle be established on the basis of a formula (e.g. based on staff cost hourly rates) or take the form of lump sums, or a combination of these methods. If established according to the principle of cost recovery, it would require a fully-fledged and transparent internal cost accounting to be in place. A high level of financial information granularity is indeed needed to properly account for all management and IT costs, even if a trade-off may exist between transparency and complexity. In recent years, eu-LISA has developed and strengthened its internal financial management processes and procedures, to ensure the transparent and effective management of its available financial resources. In particular, it has developed an activity-based costing methodology, making it possible to identify the total costs of each system managed by the Agency, and has introduced activity-based budgeting (ABB). Hence, the required foundations for deploying a service-based financing model for eu-LISA are already in place.

However, service-based financing could probably only play a limited role in the overall funding of a cross-sectoral IT agency established through an extension of the eu-LISA mandate, and could not become its main financing model. Even if the framework financial regulation applicable to EU decentralised agencies⁴⁴ makes it possible for agencies to receive financial contributions from Member States and third countries and to conclude contribution agreements and grant agreements with the European Commission, and hence to charge fees for specific services provided under these agreements, it also establishes fairly strict conditions for the use of these financing methods and clearly states that they should remain 'exceptional'. Service-based financing, in fact, requires corresponding revenues to be considered as 'assigned revenues', which can only constitute the exception but not the rule for an EU body which core budgetary management principles include the principle of universality. In addition, service-based financing would also be practically very difficult to implement on a wide scale for a cross-sectoral IT agency established through an extension of the eu-LISA mandate, which 'client' policy areas would involve stakeholders at multiple levels. Clients for some Justice or Customs IT systems, for instance, would not only consist of the Commission's DG JUST or DG TAXUD, but also of the relevant ministries or authorities in the Member States. The distribution of fees and charges between the various levels and stakeholders would raise a number of practical difficulties and probably prove to be politically sensitive.

Hence, a cross-sectoral IT agency established through an extension of the eu-LISA mandate would have to remain mostly financed from the general EU budget through a 'non-assigned'

⁴⁴ Commission Delegated Regulation (EU) 2019/715 of 18 December 2018 on the framework financial regulation for the bodies set up under the TFEU and Euratom Treaty and referred to in Article 70 of Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council

contribution, even if some additional assigned revenues may be obtained from specific service provision agreements with the Commission or the Member States in some cases. In fact, the eu-LISA establishing Regulation already makes it possible for the Agency to provide support services to the Member States and the Commission (Article 16) under specific agreements. Article 41 further states that the Agency can conclude working arrangements with the Commission, with other Union institutions and with other Union bodies, offices and agencies, which may establish a mechanism for cost recovery. These possibilities have been seldomly used so far, but they could enable the Agency to start working with other policy areas on pilot projects or interoperability components, even before a formal mandate extension may be decided.

As a cross-sectoral IT agency established through an extension of the eu-LISA mandate would have to remain mostly financed from the general EU budget through a 'non-assigned' contribution, its budgetary management would not be expected to change significantly from the current eu-LISA practice – even if the process would inevitably become more complex as more stakeholders would have to be involved in the decision-making at all stages.

Appraisal of governance model options

The hypothetical governance model options presented above for a cross-sectoral EU IT agency established through extending the activities or mandate of eu-LISA, do not really constitute alternatives, but rather a possible continuum of expansion of the Agency's responsibilities. They could potentially be considered as representing the various stages of a process, whereby the Agency would extend its activities through progressively building its portfolio and credentials in various areas in succession.

Given the starting point and the already heavy workload of the Agency for the coming years, Option 1: 'extension of activities to the Justice domain' is probably the only one that could realistically be implemented in the medium term, i.e. after the Agency's evaluation by the Commission in 2023. This implementation would make it possible to fully onboard the Justice domain in the scope of the eu-LISA activities, and enable the Agency to demonstrate its ability to develop and manage IT systems for various policy domains, involving a multiplicity of stakeholders, and to ensure that their interests are appropriately represented and safeguarded. It would not fully break-up the silo-based governance structure, though, as technical expertise would likely still need to be obtained through system-specific Advisory Groups.

Ideally, it could be beneficial to implement some elements of the proposed changes for Option 1 even before the Commission evaluation, in particular those aimed at ensuring a degree of separation between the governance of Justice IT systems and that of Home Affairs IT systems. Indeed, this could help lift the obstacles or the reservations that seem to remain for handing over the management of e-CODEX to eu-LISA. However, in the short term the attention of the Agency's stakeholders is firmly on the development of the new Home Affairs IT systems and of the interoperability components, and hence the probability of the eu-LISA establishing Regulation being amended before the Commission evaluation in 2023 appears to be low.

Based on the consultations performed for this analysis, Option 2: 'extension of mandate to Customs IT systems' does not seem to be a truly realistic option in the short-to-medium term, for several reasons. First, any extension of the eu-LISA mandate to the Customs area would, as previously mentioned, require a significant change of the legal basis of the Agency, which would have to refer to articles under both Titles V and II of Part Three of the TFEU. That would be a lengthy process, involving complex negotiations between the Commission, the Member States and the European Parliament. Second, the consultations have shown that the prospect of granting eu-LISA a possible role in managing Customs IT systems seems to be facing some opposition among the Member States, while not being so far supported by the Commission. Building up political support for such a change is a long-term endeavour, and it appears unlikely that a consensus may have emerged on the matter by 2023. Third, the Customs IT systems landscape is currently undergoing significant change as a number of systems are being developed. This IT systems landscape is unlikely to be stabilised before the middle of the decade, and it would probably be preferable to avoid the risk of jeopardising the current wave of developments by changing the applicable governance framework before they have been fully delivered and successfully put into operation.

Similarly, Option 3: 'extension of mandate to multiple policy areas/sectors' does not seem to be a realistic option in the short-to-medium term. It is likely that in case of mandate extension

an incremental approach would be favoured, and hence that eu-LISA would first have to demonstrate its ability to develop and operate IT systems beyond the AFSJ before a broader extension of its mandate to multiple policy areas/sectors could be considered. In addition, an extension of the mandate to the Digital Single Market area, and in particular to the development and management cross-border eID components and building blocks, would probably be difficult to enact. It would indeed potentially raise issues surrounding the possible processing by the Agency of personal data pertaining to EU citizens, and not only anymore to third country nationals or to persons of interest to Law Enforcement authorities. Just as for Option 2, it appears unlikely that a consensus for entrusting eu-LISA with responsibilities in that respect may emerge by 2023.

Even if the extensions of eu-LISA's mandate envisaged in Options 2 and 3 do not seem to be realistic in the short-to-medium term, the political circumstances may nevertheless evolve in the coming years and make them more viable. In this case, some of the elements proposed in this analysis regarding the governance model of a cross-sectoral EU IT agency under those options could be considered as part of the evaluation of eu-LISA by the Commission in 2023. In particular, the setting up of business-oriented permanent Advisory Groups instead of systems-focused ones could potentially be given some consideration, as it would play an important role in making the Agency's governance model more scalable.

Legal considerations

As already indicated, there is no general legal basis in the EU Treaties to establish agencies with a general, cross-sectoral scope. EU agencies are therefore usually set up on the basis of Treaty article(s) that concern the policy areas in which they have to operate.

EU agencies are in fact typically established to carry out very precise technical and/or regulatory tasks related to a single policy area, and therefore on the basis of just a few Treaty articles related to the EU's responsibilities in that area. Most agencies, indeed, are even established on the basis of a single article from the TFEU.

eu-LISA's current legal basis, on the other hand, refers to no less than eight Treaty articles, the largest number of any existing decentralised agency. In case of mandate extension to other policy areas/sectors, the Agency's legal basis would have to be extended accordingly by including references to the Treaty articles concerning the EU's responsibilities in the concerned areas. If a political agreement can be found between the co-legislators to do so, there would in principle be no legal obstacle to extending the legal basis of the Agency by including references to Treaty articles related to several policy areas, even if these pertain to different Parts, Titles and Chapters of the TFEU. EU policy instruments are indeed sometimes established on the basis of articles pertaining to several distinct parts of the TFEU. For instance, the Regulation establishing the Single Digital Gateway⁴⁵ refers to both Article 21, which pertains to Title II (Provisions having general application), Part Two (Non-discrimination and Citizenship of the Union), and Article 114, which pertains to Title VII (Common rules on Competition, Taxation, and Approximation of Laws), Chapter 3 (Approximation of Laws). This suggests that, even if there is no example so far of an EU body of agency established on the basis of Treaty articles concerning several policy areas, it would nevertheless theoretically be possible to do so – provided the political will exists and appropriate governance mechanisms can be set up.

For each of the three hypothetical mandate and governance model options described above for a cross-sectoral EU IT agency established through extending the mandate of eu-LISA, a number of legal changes would have to be considered regarding the legal basis of the Agency, but not only. Assuming that there would be no Treaty change that would modify the way EU agencies can be set up, the following changes would need to be considered.

For option 1 - Extension of activities to the Justice domain

In case of implementing Option 1, the legal basis of the Agency would have to be extended to Article 81 of the TFEU, which covers judicial cooperation in civil matters having cross-border implications. At the moment only Article 82, covering judicial cooperation in criminal matters, forms part of the eu-LISA legal basis. The inclusion of Article 81 would in principle be already needed for eu-LISA to take over the management of e-CODEX, which is mostly used in civil justice. It would in any case be needed for a broader extension of the Agency's

⁴⁵ Regulation (EU) 2018/1724 of the European Parliament and of the Council of 2 October 2018 establishing a single digital gateway to provide access to information, to procedures and to assistance and problem-solving services and amending Regulation (EU) No 1024/2012 (Text with EEA relevance.)

activities to the Justice domain, which could come after the Agency's evaluation to be completed by 2023.

In addition, the Agency's establishing Regulation would have to be adapted in several other ways:

- Article 20 regarding the composition of the Management Board would have to be amended to account for the proposed changes (inclusion of a representative from the European Parliament, and of stakeholders from the Justice domain).
- One or several articles would have to be added to establish the Justice and Home Affairs IT systems Steering Committees, as well as the Interoperability Steering Committee. The role, composition and working procedures of these Steering Committees would have to be described, as well as their interactions with the Management Board and the Advisory Groups.
- The specific Justice IT systems which development and/or operational management would be entrusted to the Agency would have to be explicitly specified.

In addition, a number of other EU Regulations would have to be amended to remove references to the Project Management Boards and possibly introduce a reference to the newly-created IT Systems Steering Committees:

- Regulation (EU) 2017/2226 establishing an Entry/Exit System (EES)
- Regulation (EU) 2018/1240 establishing a European Travel Information and Authorisation System (ETIAS)
- Regulation (EU) 2019/817 on establishing a framework for interoperability between EU information systems in the field of borders and visa
- Regulation (EU) 2019/818 establishing a framework for interoperability between EU information systems in the field of police and judicial cooperation, asylum and migration
- Regulation (EU) 2019/816 establishing a centralised system for the identification of Member States holding conviction information on third-country nationals and stateless persons (ECRIS-TCN)

Finally, a specific Union legal act would in principle have to be prepared and adopted for each of the large-scale Justice IT systems that would be entrusted to the Agency, either prior to adopting the Agency's new establishing Regulation or at a later stage.

For option 2 - Extension of mandate to Customs IT systems

In case of implementing Option 2, the legal basis of the Agency would have to be amended significantly to reflect the broadening of the Agency's scope of activities beyond the AFSJ. Next to the articles under Title V of the TFEU that constitute the current legal basis of eu-LISA (with the possible addition of Article 81 as mentioned for Option 1), various articles under Title II of the TFEU Free Movement of Goods would have to be referred to, in particular Article 33 regarding Customs cooperation. In case Taxation systems would also be brought into the scope of the Agency's activities, articles under Title VII – Common rules on

competition, taxation and approximation of laws, Chapter 2 – Tax provisions would also have to be added.

As already mentioned, there is in principle no legal obstacle to including references to Treaty articles pertaining to different Parts, Titles and Chapters of the TFEU in the legal basis of an EU instrument, including an EU body or agency – provided the political will exists to do so and appropriate governance mechanisms can be set up. This would be a first, though, as no example of any such agency or body exists so far. A thorough legal analysis would therefore probably have to be performed to fully assess the feasibility of doing so, and the key constraints and requirements that may exist in that respect.

For implementing Option 2, the establishing Regulation of the Agency would further have to be amended in several ways:

- The official name of the Agency would have to be changed, as it directly refers to the ASFJ.
- The large-scale Customs IT systems (and possibly Taxation systems) which development and/or operational management would be entrusted to the Agency would have to be explicitly specified.
- As in Option 1, Article 20 regarding the composition of the Management Board would have to be amended to account for the proposed changes.
- One or several articles would have to be added to define the composition, role and responsibilities of the Executive Board, should it be decided to establish one, as well as its interactions with the Management Board, Advisory Groups, and Agency's management and staff.
- As in Option 1, one or several articles would have to be added to establish the Justice, Home Affairs, Customs (and possibly Taxation) IT Systems Steering Committees, as well as the Interoperability Steering Committee. The role, composition and working procedures of these Steering Committees would have to be described, as well as their interactions with the Management Board and the Advisory Groups.

In addition, a number of EU legal acts would also have to be amended to reflect the extension of the Agency's mandate. In particular, the Union Customs Code (UCC) would have to be amended to specifically mention the possibility of entrusting the Agency with the development and operational management of large-scale IT systems in the area of Customs.

Finally, a specific Union legal act would in principle have to be prepared and adopted for each of the large-scale Customs IT systems that would be entrusted to the Agency, either prior to adopting the Agency's new establishing Regulation or at a later stage.

For option 3 - Extension of mandate to multiple policy areas/sectors

In case of implementing Option 3, the legal basis of the Agency would have to be amended even more significantly to reflect the broadening of the Agency's scope of activities to multiple policy areas/sectors. There again, and since there is no general legal basis in the EU Treaties to establish agencies with a general, cross-sectoral scope, this would require

adding in the establishing Regulation references to articles of the TFEU related to each and every policy area that would come within scope of the Agency's activities.

If, for instance, the Agency's activities would be extended to the development and operational management of IT systems in the Digital Single Market area – in addition to Customs systems (and possibly Taxation systems) – then the Agency's establishing Regulation would have to include, in addition to references to the TFEU articles mentioned for Option 2, a reference to Title I 'The Internal Market' of Part Three 'Union Policies and Internal Actions', and more particularly to Article 26 – as well as a reference to Article 114 on 'Approximation of Laws' (Under Title VII), which establishes provisions for the achievement of the objectives set out in Article 26.

As indicated for Option 2, there is in principle no legal obstacle to including references to Treaty articles pertaining to different Parts, Titles and Chapters of the TFEU in the legal basis of an EU instrument, including an EU body or agency. However, the multiplication of policy areas in scope of an Agency's activities requires a parallel multiplication of references to many different articles of the TFEU in its establishing Regulation, which could raise specific legal issues. As already stated, a thorough legal analysis would therefore probably have to be performed to fully assess the feasibility of doing so, and the key constraints and requirements that may exist in that respect.

For implementing Option 3, the establishing Regulation of the Agency would further have to be amended in several ways:

- As in Option 2, the official name of the Agency would have to be changed, as it directly refers to the ASFJ. A possible candidate would be "European Union Agency for the Operational Management of Large-Scale Trans-European IT Systems".
- As in Option 2, the new large-scale IT systems which development and/or operational management would be entrusted to the Agency would have to be explicitly specified.
- As in Options 1 and 2, Article 20 regarding the composition of the Management Board would have to be amended to account for the proposed changes.
- As in Option 2, one or several articles would have to be added to define the composition, role and responsibilities of the Executive Board, should it be decided to establish one, as well as its interactions with the Management Board, Advisory Groups, and Agency's management and staff.
- As in Options 1 and 2, one or several articles would have to be added to establish the new IT Systems Steering Committees per policy area, as well as the Interoperability Steering Committee. The role, composition and working procedures of these Steering Committees would have to be described, as well as their interactions with the Management Board and the Advisory Groups.
- Article 27 Advisory Groups would have to be amended to account for the replacement of systems-based groups by business-oriented groups. All reference to systems-based Advisory Groups would have to be removed from the Regulation.
- One or several articles would have to be added to establish the new mechanisms by which the Agency would obtain technical expertise regarding the various systems it would be entrusted with, in particular systems under development. As this expertise would not be obtained through permanent systems-based Advisory Groups anymore, the Regulation would have to indicate the processes and rules regarding the establishment of ad-hoc expert groups with a very specific and time-limited mandate, their composition and their interactions with the permanent Advisory Groups as well as with the relevant IT Systems Steering Committees.

In addition, a number of legal acts would need to be amended to remove references to the systems-based Advisory Groups and possibly introduce a reference to the newly-created Steering Committees:

- Regulation (EU) No 603/2013 on the establishment of 'Eurodac'
- Regulation (EU) 2017/2226 establishing an Entry/Exit System (EES)
- Regulation (EU) 2018/1240 establishing a European Travel Information and Authorisation System (ETIAS)
- Regulation (EU) 2019/817 on establishing a framework for interoperability between EU information systems in the field of borders and visa
- Regulation (EU) 2019/818 establishing a framework for interoperability between EU information systems in the field of police and judicial cooperation, asylum and migration
- Regulation (EU) 2019/816 establishing a centralised system for the identification of Member States holding conviction information on third-country nationals and stateless persons (ECRIS-TCN)

Various Union legal acts governing EU cooperation in the policy areas that would be in scope of the Agency's mandate and activities may also need to be amended to specifically mention the possibility of entrusting the Agency with the development and operational management of large-scale IT systems in those areas.

Finally, as in Options 1 and 2, a specific Union legal act would in principle have to be prepared and adopted for each of the large-scale IT systems that would be entrusted to the Agency, either prior to adopting the Agency's new establishing Regulation or at a later stage. In order to enable the Agency to take over more systems and responsibilities in a flexible way across multiple areas, a lifting of this requirement could however be considered. The Agency may instead be given a broader, general competency for developing and managing IT systems in the policy areas covered by its establishing Regulation, subject only to the Management Board's approval. This kind of general competence would however constitute a major legal change for an EU agency, which feasibility would need to be thoroughly assessed by legal experts.

Potential benefits of a cross-sectoral EU IT agency

The consultations carried out for this analysis have shown that there would be, in principle, significant support among key stakeholders for the establishment in the future of a cross-sectoral EU IT agency. Most stakeholders consulted would indeed see a number of potential advantages and benefits to setting up a shared service provider / competence centre providing IT-related services and solutions to multiple policy areas.

The key advantages and benefits mentioned are as follows:

- First, the establishment of a cross-sectoral EU IT agency entrusted with the development and operational management of trans-European IT systems for several policy areas would make it possible to ensure a higher degree of **coherence and consistency in the way these systems are designed, developed, and managed**, than if they would be developed and managed separately for each policy area – either by Commission services or by separate agencies. As more and more trans-European IT systems are established or planned across multiple areas, and as their strategic importance for the delivery of EU policies increases, the need for such coherence and consistency also is also growing. In fact, separate development and management would potentially lead to a multiplication of redundant, competing or uninteroperable solutions, methods, tools and processes that would risk hampering rather than facilitating cooperation between European public administrations, at a time when the need for coherent and consistent EU action is getting ever more crucial.
- Second, the establishment of a cross-sectoral EU IT agency would potentially help deliver significant **cost efficiencies and savings**. It would make it possible to pool resources – by definition limited – to develop and adopt wherever possible common, reusable and flexible solutions in an agile and efficient way. Each policy area would be able to benefit from the experience acquired in others, which would help reduce the time and effort needed to develop new systems and streamline operational management across the board. This would potentially help contain or even reduce costs in terms of development, maintenance, implementation, operation and also training at the EU and national level, at a time when public finances remain constrained.
- Third, the establishment of a cross-sectoral EU IT agency would potentially lead to an increase in the level of **competence and capacity** available for developing and managing trans-European IT systems across policy areas. This would include not only technology-related competence as such, including related to security, but also and perhaps more importantly management and innovation competence and capacity. As a result, more valuable and innovative systems and solutions could potentially be developed and deployed, leveraging state-of-the-art technologies and combining them in novel ways. Also, an increase in the level of procurement and supplier management competence and capacity could be obtained, leading to selecting the best possible service providers and obtaining increased value for money from their work.
- Fourth, the delegation of the development and operational management of trans-European IT systems for several policy areas to a cross-sectoral EU IT agency would make it possible to fully enact **effective multi-level governance** for these systems,

involving both the EU and its Member States. By doing so it would ensure that responsibility for these systems and their operations can be effectively shared between the Commission and the Member States – while this responsibility rests disproportionately on the Commission if and when trans-European systems are developed by its own services. It would also ensure that all Member States can play a role in steering the development and management of these systems, while actually being compelled to play their part in their deployment and implementation.

- Fifth, the establishment of a cross-sectoral EU IT agency would potentially lead to the achievement of **higher performance** in the development and management of trans-European IT systems. Responsibility for this development and management would indeed be entrusted to an agency that would have a strong incentive to perform, as non-performance may lead to its termination and disbanding. The agency would therefore be incentivised to act as a real service provider, serving a number of ‘clients’ and thriving to fully satisfy each of them. Its performance would be measurable in terms of better planning, quicker response, better budget execution, more accurate allocation of resources, etc. Having delegated the development and management of trans-European IT systems to a high-performing service provider, the Commission services would be able to re-focus their work on the policy and strategic aspects of these systems, and on their use to support the implementation of EU policies and the achievement of their objectives.

Reaping these benefits, however, would require a series of preconditions to be met. These include defining a consistent scope and service portfolio for the cross-sectoral EU IT agency, setting up the right framework for its management and governance, ensuring that it benefits from the required trust and support from the Commission and the Member States to carry out its missions, and granting it with the level of resources required to do so.

It should be noted that if the consultations carried out for this analysis indicate a strong level of support in principle for the establishment in the future of a cross-sectoral EU IT agency, they nevertheless suggest that the benefits of setting up a shared service provider/competence centre providing IT-related services and solutions to multiple policy areas would be seen as being higher if that agency was tasked with developing and providing sector-independent/agnostic solutions and building blocks that could be used by the various EU policy areas/sectors to develop their own business-specific systems.

These sector-independent/agnostic services provided by the Agency to its ‘client’ policy areas could include networking and communication infrastructure, security and interoperability components, hosting infrastructure, business-agnostic software components, interfaces or platforms, and also if deemed relevant cloud computing infrastructure and services, blockchain-related infrastructure and services, AI and machine learning expertise, etc. However, in this model, the Agency would not be entrusted with the development or the operational management of business-specific systems on behalf of its policy area clients, even if it could support it. The responsibility for developing and managing those business-specific systems would remain with the various concerned policy areas, meaning that the Commission DGs would either have to maintain an IT capability, or to outsource the management of their systems to a policy-specific EU body or agency. The mandate of the cross-sectoral EU IT agency would therefore be quite similar to that of the cross-sectoral IT Agencies that exist in most Member States, where government departments retain ownership of and responsibility for business-specific systems.

This type of cross-sectoral EU IT agency, it has to be noted, could not be established by extending the mandate of eu-LISA, as it would not be compatible with eu-LISA’s core business of developing and managing the EU’s essential large-scale IT systems in the field

of Home Affairs, which according to all stakeholders should not be put at risk in any way. The cross-sectoral EU IT agency would therefore have to be established as a new and separate entity, which would not necessarily take over eu-LISA's responsibilities in the AFSJ, and which could even become its service provider.

In case a cross-sectoral EU IT agency would be established in the future through extending the eu-LISA mandate, a detailed assessment of the advantages and benefits of the extension would have to be performed for each of the policy areas that would come within scope of the Agency's activities.

Risk considerations

The establishment in the future of a cross-sectoral EU IT agency providing services to multiple areas would naturally convey a number of risks. Assuming that this cross-sectoral EU IT agency would result from an extension of the eu-LISA mandate, the following possible risks could be identified:

- **A risk of political resistance** by some Member States or within the European Commission, which for various reasons would not necessarily see an extension of the scope of activities or of the mandate of eu-LISA favourably. This could result, if not addressed and managed properly, in reducing the chance of this extension from ever being considered, or from happening in the most effective way possible. To mitigate this risk, it is important to ensure that a dialogue is engaged early on with the Member States and with the Commission, aimed at discussing these matters in a fully open and transparent way, and at further elaborating a viable path for the extension of the Agency's mandate to new areas.
- **A risk of overloading the Agency** with the development and/or management of too many systems pertaining to too many and too different policy areas in a short period of time. Eu-LISA has developed close proximity to the business and its requirements in the Home Affairs area, but would need to go through a learning curve for each of the new policy areas it would have to serve. Extending its mandate to several policy areas at once would make this learning phase more challenging, especially as the Agency has yet to demonstrate its capacity to build and deliver completely new systems. Going for a mandate extension to several new policy areas at the same time would risk hampering the Agency's capacity to fulfil its missions for each of its client policy areas, but also to effectively achieve synergies between systems and policy areas. In order to mitigate this risk and ensure that the mandate extension can be a success, it would probably be preferable to adopt a phased approach, whereby the Agency would be given the opportunity to build up its credibility and service portfolio progressively, extending its activities to new and complementary areas only when appropriate.
- **A risk of failing to provide the Agency with the means and resources needed** to fulfil its extended mandate. An extended mandate inevitably calls for increased financial resources. However, as a key motivation for extending the Agency's mandate would be the willingness to achieve synergies and cost efficiencies, the EU budgetary authority could be tempted to immediately contain the resources allocated to the Agency. Even if the Agency would be expected to deliver significant cost savings over time, the resources it would need to fulfil its missions, especially during the phase in which it onboards new client policy areas, should not be underestimated. In order to mitigate this risk, a thorough assessment of the additional resources needed should be performed before any mandate extension.
- A risk of exposing multiple critical IT systems to common and potentially compounding **security threats**. The establishment of a cross-sectoral EU IT agency would be expected to increase the level of competence and capacity available for developing and managing trans-European IT systems, including with regards to security, yet it remains that no IT system can be 100% secure and/or operate flawlessly under every conceivable circumstance. In order to achieve synergies in its management of IT systems from different policy areas, the Agency would be expected to re-use a number of software components and building blocks across multiple systems, therefore exposing various systems to a common and potentially

simultaneous security risk in case one of those components or building blocks would be found to have a vulnerability. The Agency would also be expected to host multiple systems from various policy areas in a common environment and physical infrastructure, which could lead to multiple and cascading/compounding issues in case of either intrusion or malfunction. In order to mitigate this security risk, it would be necessary to ensure that the cross-sectoral EU IT agency can become from the outset an IT security excellence centre and be granted appropriate means and resources to do so. Security should be the first and foremost priority of its design, development and operational management work, and should be embedded into all its working methods and processes. Specific means should be implemented to proactively track vulnerabilities and to prevent the effects of possible security flaws from cascading/compounding across the Agency's system landscape. In addition, in order to enhance physical security, the establishment of additional technical sites (in existing or new locations) may be considered if and when new systems pertaining to new policy areas are entrusted to the Agency. This could help mitigate the risk of hosting too many systems for various policy areas at a single technical site – without affecting the hosting of existing Home Affairs systems in Strasbourg. The Management Board could then be granted authority for making decisions concerning the distribution of new systems/solutions between the Agency's technical sites, with a view to maximising efficiency and ensuring the highest levels of physical and information security.

- **A risk of triggering public opinion backlash** in case the Agency would be perceived as becoming responsible for the management of too many systems potentially processing sensitive personal data about not only third country nationals but also EU citizens. The European public, at least in some Member States, tends to be sensitive about data protection issues, and suspicious of organisations and systems that collect and/or process massive amounts of personal data that could potentially be used for surveillance purposes. This risk would be especially high if the Agency would be granted responsibility for developing and managing cross-border eID components and building blocks for the Digital Single Market area. To mitigate it, the Agency would have to communicate about its role in developing cross-border infrastructure for electronic identification and electronic trust services, and about the fact that this role would not involve managing large-scale databases and storing sensitive personal data of European citizens. This would require significantly strengthening the Agency's communication capabilities, so it can be fully equipped to manage its image among the general public.

Conclusions and recommendations

Conclusions

This analysis has made it possible to reach the following conclusions:

- The current governance model of eu-LISA does not enable the Agency to take over responsibility for the development and/or operational management of IT systems beyond the AFSJ – or even to take on responsibility for developing or managing many more systems within the AFSJ. This governance model, which remains silo-based, is already increasingly stretched and does not appear to be scalable.
- An extension of the Agency's mandate to other policy areas beyond the AFSJ would in principle be possible, provided clear synergies can be identified at policy level and efficiencies achieved at operational level. However, any decision to extend the eu-LISA mandate to other policy areas/sectors than the AFSJ would be a political decision, which would entail many other dimensions than just effectiveness of policy delivery and cost efficiency of operations. This would in particular be the case if a decision would be made to bring together the management of IT systems supporting the Customs Union (i.e. the heart of the EU's Single Market) together with those supporting internal security and border management (i.e. the symbol of the Member States' sovereignty).
- Any extension beyond the AFSJ remains at this stage hypothetical, as eu-LISA first has to demonstrate its capacity to successfully deliver and manage a set of new Home Affairs IT systems (EES, ETIAS) and interoperability components, and also to successfully manage the extension of its activities to the Justice domain (with the development of the ECRIS-TCN system and, possibly, the take-over of the management of e-CODEX).
- However, this does not prevent the Agency's governance model from evolving, in order to make it more adapted for its already expanding role and growing workload, but also potentially fit for a possible formal extension of its mandate beyond the AFSJ on a longer-term horizon.
- This analysis has made it possible to identify two key requirements for a possible, hypothetical evolution of the Agency's governance model that would aim to make it fit for a mandate extension to other policy areas/sectors:
 - The governance model would need to be capable of ensuring a certain degree of **distinction or even separation of governance arrangements** by sector, enabling the specificities of each policy area/sector to be fully taken into account, and its independence to be safeguarded. This would also be required were the Agency to take over wide-ranging responsibilities for the development and management of Justice IT systems – as the Justice domain stakeholders place a lot of emphasis on the independence of the judiciary and on the need to have specific governance arrangements in place for their systems.
 - The governance model would need to become **more 'horizontal'**, i.e. organised around business-related categories (e.g. policy areas) or business processes rather than around specific IT systems. This would be required to make the Agency's governance model scalable and adaptable, as well as to be able to

effectively deliver real synergies and efficiencies between systems as well as between policy areas/sectors.

- Overall, it is possible to identify three possible evolutions of the eu-LISA governance model, based on the following three types of extensions of its activities or mandate:
 - **A limited extension of the Agency’s activities within the confines of the AFSJ**, meaning an extension to the Justice domain not limited to ECRIS-TCN, but also including e-CODEX and possibly other IT systems developed as part of the European e-Justice Action Programme.
 - **A limited extension of the Agency’s mandate beyond the limits of the AFSJ**, meaning presumably to the Customs (and possibly also Taxation) area, for which clear synergies would exist with the Home Affairs domain.
 - **A broader extension of the Agency’s mandate to several policy areas outside of the AFSJ**. In addition to Customs area (and possibly also Taxation), a possible candidate for such extension would be the Digital Single Market area, in particular with regards to the development and management of cross-border eID components, building blocks and infrastructure.
- On the basis of these three types of extensions of eu-LISA’s activities or mandate, this analysis identified three possible options for the hypothetical evolutions of the Agency’s governance model. Each of these options would entail changes impacting the Management Board, the Advisory Groups, and the intermediate space currently occupied – for the development of new systems only – by the Programme Management Boards. In all three options these temporary Programme Management Boards would be replaced by permanent Steering Committees in charge of driving the development and management of IT systems for each of the policy areas or domains in scope of the Agency’s activities.
- The hypothetical governance model options identified for a cross-sectoral EU IT agency established through extending the activities or mandate of eu-LISA do not really constitute alternatives, but rather a continuum of expansion of the Agency’s responsibilities. They can therefore be considered as representing the possible various stages of a process, whereby the Agency would extend its activities through progressively building its credibility in successive policy areas.
- Given the starting point and the already heavy workload of the Agency for the coming years, Option 1 (extension of activities to the Justice domain) is probably the only one that could realistically be implemented in the medium term, i.e. after the Agency’s evaluation in 2023. Ideally some elements of the proposed changes should however even be implemented earlier, as they could help lift the obstacles or the reservations that may remain for handing over the management of e-CODEX to eu-LISA.
- Options 2 (extension of mandate to Customs IT systems) and 3 (extension of mandate to multiple policy areas/sectors) could potentially become realistic options for the next cycles of evaluation of the Agency’s performance (i.e. to be conducted every five years after 2023). This would leave enough time to the Agency to demonstrate its ability to successfully implement a more horizontal governance model, making it fit for taking responsibility for more systems in more policy areas.
- Even if the extensions of eu-LISA’s mandate envisaged in Options 2 and 3 do not seem to be realistic in the short-to-medium term, the political circumstances may nevertheless evolve in the coming years and make them more viable. In this case, some of the elements proposed in this analysis regarding the governance model of a cross-sectoral EU IT agency under those options could be considered as part of the evaluation of eu-LISA by the Commission in 2023. In particular, the setting up of

business-oriented permanent Advisory Groups instead of systems-focused ones could potentially be given some consideration, as it would play an important role in making the Agency's governance model more horizontal and more scalable.

Recommendations

Based on the performed analysis, our recommendations are the following:

- The results of this analysis should be presented to key stakeholders at EU level and in the Member States, and discussed with them in order to further advance the strategic reflection about the future of the eu-LISA Agency as well as about the governance of trans-European IT systems. The performance of this analysis has entailed a high-level consultation of some of these stakeholders, but moving on to the next stage and refining the options for the extension of the eu-LISA mandate and the evolution of its governance model would now require engaging these stakeholders in a constructive and transparent dialogue, and carrying out further work on these options in cooperation or in association with some of them. The eu-LISA executive management should also be engaged in this effort.
- Further work on the future mandate and governance model of eu-LISA should focus on ensuring a successful extension of the Agency's activities to the Justice domain, based on the implementation of Option 1 reviewed in this analysis. A number of adaptations to the eu-LISA governance model are indeed needed for the Agency to fully become an IT service provider for the whole of the AFSJ and not just for the Home Affairs domain. These adaptations could be made following the evaluation of the Agency that will be performed by the Commission by the end of 2023, however they would probably need to be partially implemented before that in order to remove the last obstacles to the Agency being entrusted with the management and further development of e-CODEX. There is already strong support among the Member States for handing over the management of e-CODEX to eu-LISA, but some reservations seem to remain among some stakeholders, in particular as the Agency's current governance model is not perceived as guaranteeing sufficient independence for the governance of Justice IT systems. In order to ensure that these remaining reservations can be lifted and the handover of e-CODEX to eu-LISA can be finally confirmed, a phased approach to the implementation of Option 1 could be envisaged, whereby an e-CODEX Steering Committee would be established by the future e-CODEX Regulation as a precursor to a future Justice IT systems Steering Committee, and whereby a more extensive involvement of Justice stakeholders in the working and deliberations of the Management Board would be sought, even if informally in a first stage. This would potentially make it possible for eu-LISA to be entrusted with the management of e-CODEX without having to amend the Agency's establishing Regulation, and pave the way for a broader evolution of its governance model after the Commission evaluation in 2023. This would also make it possible to avoid having to find yet another interim solution for the management of e-CODEX once the current EU-funded system maintenance project comes to a close by the end of 2021.
- Even if a formal extension of the Agency's mandate beyond the AFSJ does not seem to be a realistic prospect in the short-to-medium term, eu-LISA should nevertheless be encouraged to use the possibilities already offered by its establishing Regulation to develop cooperation and joint working agreements with other policy areas. Article 41 of the Regulation indeed enables the Agency to establish formal working arrangements with Union institutions, bodies, offices and agencies, when authorised

by the Management Board, which may include a mechanism for cost recovery. This option could in particular be used to establish a cooperation agreement with DG TAXUD concerning the development of interoperability components between Home Affairs and Customs IT systems. It could also be used to develop further cooperation agreements with other policy areas, for example concerning the development of pilot projects. These cooperation agreements could help the Agency develop a closer relationship and reach a higher degree of familiarity with those various policy areas, which could be an important step towards a more formal extension of its mandate at a later stage. Once eu-LISA will have demonstrated its capacity to successfully deliver and manage a set of new Home Affairs IT systems (EES, ETIAS) and interoperability components, will have successfully extended its activities to the Justice domain (with the development of the ECRIS-TCN system and, possibly, the take-over of the management of e-CODEX and of other IT systems to be developed as part of the European e-Justice Action Programme), and will have established working arrangements with other policy areas, a formal extension of the Agency's mandate beyond the AFSJ will likely have a better chance of being considered.

Appendices

Appendix 1: Methodology

The figure below presents an overview of the methodological approach used to perform the analysis.

Approach

Methodological approach - Overview

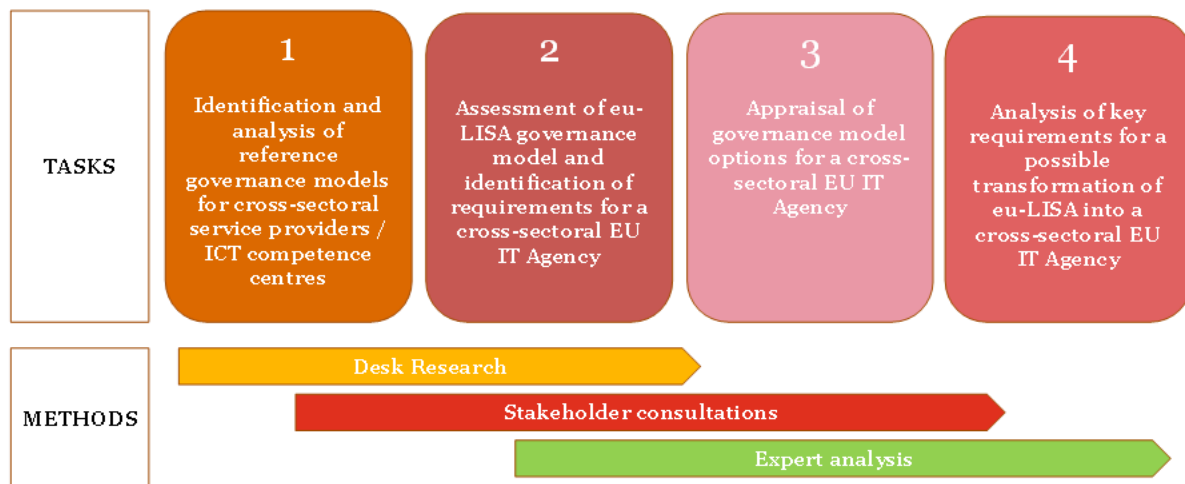


Figure 6: Overview of the methodological approach to perform the analysis

The performance of the analysis was based on the following four tasks:

1. Identification and analysis of reference governance models for cross-sectoral service providers / ICT competence centres
2. Assessment of eu-LISA governance model and identification of requirements for a cross-sectoral EU IT agency
3. Appraisal of governance model options for a cross-sectoral EU IT agency
4. Analysis of key requirements for a possible transformation of eu-LISA into a cross-sectoral EU IT agency

Each of these tasks was comprised of a set of activities, which are further presented below.

1. Identification and analysis of reference governance models for cross-sectoral service providers / ICT competence centres

- 1.1 Identification of cross-sectoral service providers / ICT competence centres at the EU level or in the Member States.

- 1.2 Selection of up to 6 relevant service providers / ICT competence centres with a cross-sectoral scope.
- 1.3 Review and analysis of governance models of identified cross-sectoral service providers / ICT competence centres:
 - 1.3.1 Documentation of governance model:
 - 1.3.2 Establishment of a classification/typology of governance models for cross-sectoral service providers/ ICT competence centres, building on existing governance model typologies.
- 1.4 Identification of governance models that could potentially constitute options for a cross-sectoral ICT hub and service provider at EU level, if any, taking into account issues of scale and of multi-level governance.

2. Assessment of eu-LISA governance model and identification of requirements for a cross-sectoral EU IT agency

- 2.1 Analysis and documentation of existing eu-LISA governance model
 - role, size, composition and decision-making mechanisms of the management board;
 - representation and influence of political authority (European Commission);
 - role and composition of working groups and advisory groups;
 - relations between the management board and the executive management;
 - responsibilities for the definition and implementation of procedures for taking decisions relating to operations and operational management;
 - paths for accountability.
- 2.2 Qualitative assessment of current eu-LISA governance arrangements in relation to current Agency mandate:
 - fitness for purpose;
 - effectiveness;
 - adaptability/flexibility;
- 2.3 Identification and analysis of governance arrangements for the development and management of other EU-wide IT solutions, including in areas such as e-Justice and e-Codex, or customs IT systems.
- 2.4 Identification of key governance requirements for moving towards a cross-sectoral ICT hub/service provider at EU level, including:
 - changes to role and/or composition of Management Board to enable the cross-sectoral agency to operate effectively;
 - representation of the interests of different policy areas in the Management Board, taking into account the involvement of several European Commission Directorates General;
 - representation of interests of different stakeholders in the system development phase;
 - roles of the Programme Management Boards and Advisory Groups for specific IT systems;
 - budget management and financing of the projects, based on the service-based financing model.

3. Appraisal of governance model options for a cross-sectoral EU IT agency

- 3.1 Evaluation of the governance model options identified on the basis of key governance requirements for a cross-sectoral ICT hub/service provider at EU level (see 2.4 above), as well as on the basis of budgetary management considerations, expected benefits, feasibility and political acceptability.
- 3.2 Identification and documentation of the best possible option for a possible evolution of eu-LISA towards a cross-sectoral EU IT agency.
- 3.3 Gap analysis between current eu-LISA governance arrangements and identified best governance model options for a cross-sectoral ICT hub/service provider at EU level.

4. Analysis of key requirements for a possible transformation of eu-LISA into a cross-sectoral EU IT agency

- 4.1 High level analysis of key requirements concerning budget management and financing of the projects.
- 4.2 High level analysis of legal and political requirements – including assessment of political feasibility, identification of suitable legal basis (or bases) and of legal acts that would need to be changed - and to which extent.
- 4.3 Identification of main preconditions for achieving the benefits of a cross-sectoral IT agency (e.g. increase of competence, pooling of resources, synergies and cross-learning, cost savings, etc.).
- 4.4 Identification of key risks associated with the transformation (political, financial, organisational, etc.).
- 4.5 Definition of high-level roadmap including chronological phases and steps for achieving the transformation.

Methods and tools

The project activities were performed using the following methods and tools:

- Desk research
- Interviews
- Expert analysis

Desk research

The following will be reviewed and analysed:

- all the documents relevant for the analysis that are listed in the Annex to the terms of reference;
- all additional documentation that we will identify as relevant to the purpose of the analysis.

This desk research was particularly relevant to the following activity phases:

- 1 Identification and analysis of reference governance models for cross-sectoral service providers / ICT competence centres
- 2 Assessment of eu-LISA governance model and identification of requirements for a cross-sectoral EU IT agency (in particular 2.1 Analysis and documentation of existing eu-LISA governance model)

The main objectives of this desk research were to:

- collect qualitative and quantitative information and data required for the analysis;
- outline early findings and preliminary assessments;
- identify areas for further research and draft interview questions;
- map stakeholders and identify the persons to be consulted;
- support the development of consultation plan and strategy including interview objectives, plans and questionnaires.

The documents reviewed have included, among others:

- policy documents and studies;
- legal documents;
- strategic and operational plans;
- organisational charts;
- procedures and processes;
- activity reports;
- project and organisational audits, evaluations and assessments;
- etc.

A list of documents reviewed is included as an annex to this report.

Interviews

A series of interviews were conducted with representatives of the main stakeholders relevant for the analysis. These have included:

- representatives of eu-LISA;
- representatives of Member States involved in eu-LISA governance (Management Board and/or Advisory Groups);
- representatives of governance bodies of EU-wide IT solutions in other policy areas, such as e-Justice and e-Codex, and customs IT systems;
- representatives of relevant cross-sectoral government ICT agencies/service providers/competence centres in EU Member States;
- representatives of the European Commission, including EC official(s) involved in the governance of eu-LISA, of EU-wide IT solutions in other policy areas (e.g. DG TAXUD, DIGIT);
- expert from the European Court of Auditors;
- representative from Europol, Eurojust, and ENISA.

The list of interviewees was established on the basis of the initial desk research performed, and in agreement with the Contracting Entity.

The main objectives of these interviews were to:

- confirm (or disconfirm) and complete early findings and preliminary assessments;
- obtain additional information of a quantitative and qualitative nature;
- test, challenge and validate hypotheses and ideas;
- collect further suggestions and proposals relevant to the various aspects of the analysis.

The interviews were in particular be instrumental to performing the following activity phases:

- 1 Identification and analysis of reference governance models for cross-sectoral service providers / ICT competence centres (in particular 1.3 Review and analysis of governance models of identified cross-sectoral service providers / ICT competence centres)
- 2 Assessment of eu-LISA governance model and identification of requirements for a cross-sectoral EU IT agency (in particular 2.2 Qualitative assessment of current eu-LISA governance arrangements in relation to current Agency mandate, 2.3 Identification and analysis of governance arrangements for the development and management of other EU-wide IT solutions, and 2.4 Identification of key governance requirements for moving towards a cross-sectoral ICT hub/service provider at EU level).
- 3 Appraisal of governance model options for a cross-sectoral EU IT agency, in particular 3.1 Evaluation of governance model options identified and 3.3 Gap analysis between current eu-LISA governance arrangements and identified best governance model options for a cross-sectoral ICT hub/service provider at EU level.

We conducted the interviews once equipped with a robust understanding of the key aspects requiring detailed investigation, based on our initial desk research. The exercise leveraged on our methodology and our experience in conducting stakeholder consultations at various levels for operational, organisational and government assessments in public sector bodies, including at EU level.

We developed a consultation plan for the overall set of interviews, and conducted the interviews in logical sequence to ensure that ongoing findings can be incrementally built into the consultation and learning process. We developed a detailed questionnaire and guide for each of the interviews, targeted for the specific stakeholder consulted. The questionnaires constituted overall guidelines for the interviews, listing all elements to be discussed with the interviewees, yet used with some degree of flexibility and adaptability during the interview itself. The consultation plan and interview questions per stakeholder were shared and agreed with the Government Office of Estonia before the start of the consultation process.

The interviews were conducted either face-to-face, through video-conferencing or by telephone.

The list of interviews conducted for this analysis is included as an annex to this report.

Expert analysis

Following the initial desk research and the interviews, our team performed an in-depth analysis on the information and data collected to perform the following activities:

- 3 Appraisal of governance model options for a cross-sectoral EU IT agency.
- 4 Analysis of key requirements for a possible transformation of eu-LISA into a cross-sectoral EU IT agency.

This expert analysis was aimed at providing informed and documented answers to the analysis questions presented in the terms of reference and referenced above, as well as to the connected issues that may arise in the course of the analysis. It underpins expert judgment on possible options and solutions, as well as recommendations for action or for further analysis. Additional consultations were conducted to support the expert analysis, in particular to confirm some key hypotheses and refine some possible options.

Appendix 2: List of documents reviewed

The following documents have been reviewed for the purpose of this analysis:

Documents concerning eu-LISA:

- Regulation (EU) No 1077/2011 of the European Parliament and of the Council of 25 October 2011 establishing a European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice.
- Independent external evaluation of the European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice – eu-LISA, Final evaluation report, March 2016
- Report from the Commission to the European Parliament and of the Council on the functioning of the European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice (eu-LISA), COM(2017) 346 final, 29.6.2017
- Commission Staff Working Document eu-LISA Evaluation, Accompanying the document Report from the Commission to the European Parliament and the Council on the functioning of the European Agency for the large-scale IT systems in the area of Freedom, Security and Justice (eu-LISA), SWD(2017) 249 final, 29.6.2017
- Proposal for a Regulation of the European Parliament and of the Council on the European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice, and amending Regulation (EC) 1987/2006 and Council Decision 2007/533/JHA and repealing Regulation (EU) 1077/2011, COM(2017) 352 final, 29.6.2017
- eu-LISA Strategy 2018-2022, 2017-149, December 2017
- eu-LISA Programming Document 2018-2020, 2017-116 REV 2, December 2017
- eu-LISA Consolidated Annual Activity Report 2017, 2018-010, Adopted on 20.03.2018
- Regulation (EU) 2018/1726 of the European Parliament and of the Council of 14 November 2018 on the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA), and amending Regulation (EC) No 1987/2006 and Council Decision 2007/533/JHA and repealing Regulation (EU) No 1077/2011
- eu-LISA Programming Document 2019-2021, 2017-123 REV 4, December 2018
- eu-LISA Consolidated Annual Activity Report 2018, 2019-122 REV. 1, Adopted on 26 June 2019
- Decision of the Management Board No 2019-198 establishing the Financial Rules of the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA), 2019-198 REV 1, 28/08/2019
- EU information systems supporting border control - a strong tool, but more focus needed on timely and complete data, European Court of Auditors Special Report N°20, November 2019

EU legal acts concerning IT systems entrusted to eu-LISA

- Regulation (EC) No 1987/2006 of the European Parliament and of the Council of 20 December 2006 on the establishment, operation and use of the second generation Schengen Information System (SIS II)
- Regulation (EC) No 767/2008 of the European Parliament and of the Council of 9 July 2008 concerning the Visa Information System (VIS) and the exchange of data between Member States on short-stay visas (VIS Regulation)
- Regulation (EU) No 603/2013 of the European Parliament and of the Council of 26 June 2013 on the establishment of 'Eurodac' for the comparison of fingerprints for the effective application of Regulation (EU) No 604/2013 establishing the criteria and mechanisms for determining the Member State responsible for examining an application for international protection lodged in one of the Member States by a third-country national or a stateless person and on requests for the comparison with Eurodac data by Member States' law enforcement authorities and Europol for law enforcement purposes, and amending Regulation (EU) No 1077/2011 establishing a European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice
- Regulation (EU) 2017/2226 of the European Parliament and of the Council of 30 November 2017 establishing an Entry/Exit System (EES) to register entry and exit data and refusal of entry data of third-country nationals crossing the external borders of the Member States and determining the conditions for access to the EES for law enforcement purposes, and amending the Convention implementing the Schengen Agreement and Regulations (EC) No 767/2008 and (EU) No 1077/2011
- Regulation (EU) 2018/1240 of the European Parliament and of the Council of 12 September 2018 establishing a European Travel Information and Authorisation System (ETIAS) and amending Regulations (EU) No 1077/2011, (EU) No 515/2014, (EU) 2016/399, (EU) 2016/1624 and (EU) 2017/2226
- Regulation (EU) 2019/816 of the European Parliament and of the Council of 17 April 2019 establishing a centralised system for the identification of Member States holding conviction information on third-country nationals and stateless persons (ECRIS-TCN) to supplement the European Criminal Records Information System and amending Regulation (EU) 2018/1726
- Regulation (EU) 2019/817 of the European Parliament and of the Council of 20 May 2019 on establishing a framework for interoperability between EU information systems in the field of borders and visa and amending Regulations (EC) No 767/2008, (EU) 2016/399, (EU) 2017/2226, (EU) 2018/1240, (EU) 2018/1726 and (EU) 2018/1861 of the European Parliament and of the Council and Council Decisions 2004/512/EC and 2008/633/JHA
- Regulation (EU) 2019/818 of the European Parliament and of the Council of 20 May 2019 on establishing a framework for interoperability between EU information systems in the field of police and judicial cooperation, asylum and migration and amending Regulations (EU) 2018/1726, (EU) 2018/1862 and (EU) 2019/816

Documents concerning the governance of EU decentralised agencies:

- Joint Statement of the European Parliament, the Council of the EU and the European Commission on decentralised agencies and Common Approach, July 2012

- Roadmap on the follow-up to the Common Approach on EU decentralised agencies, December 2012
- Commission progress report on the implementation of the Common Approach, 10 December 2013
- Report from the Commission - Progress report on the implementation of the Common Approach on EU decentralised Agencies, COM(2015) 179 final, 24.4.2015
- Agencification of the European Union Administration: Connecting the Dots, Morten Egeberg and Jarle Trondal, ARENA Working Paper 3/2016, March 2016
- EU Agencies, Common Approach and Parliamentary Scrutiny, European Implementation Assessment - European Parliamentary Research Service (EPRS), November 2018
- EU agencies after 25 years: a missed opportunity to enhance EU governance, Clingendael Institute, December 2018
- Commission Delegated Regulation (EU) 2019/715 of 18 December 2018 on the framework financial regulation for the bodies set up under the TFEU and Euratom Treaty and referred to in Article 70 of Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council
- Report on the implementation of the legal provisions and the Joint Statement ensuring parliamentary scrutiny over decentralised agencies (2018/2114(INI)), European Parliament Committee on Constitutional Affairs, 30.1.2019
- European Parliament resolution of 14 February 2019 on the implementation of the legal provisions and the Joint Statement ensuring parliamentary scrutiny over decentralised agencies (2018/2114(INI))
- Agencification of EU Executive Governance, TARN Policy Brief 2019 no. 1 – Policy recommendations for reforming EU agency governance, May 2019

Documents on Justice IT systems

- In Search of Smartness: The EU e-Justice Challenge Marco Velicogna, Informatics 2017, 4, 38, November 2017
- e-CODEX - Draft roadmap - Working Party on e-Law (e-Justice) - Expert group on e-CODEX, 25 January 2018
- Proposal for a Regulation of the European Parliament and of the Council amending Council Regulation (EC) No 1206/2001 of 28 May 2001 on cooperation between the courts of the Member States in the taking of evidence in civil or commercial matters, COM/2018/378 final, 31.5.2018
- 2019-2023 Strategy on e-Justice (2019/C 96/04), EU Council, March 2019
- 2019-2023 Action Plan European e-Justice (2019/C 96/05), EU Council, March 2019
- Statement of Austria, Czechia, Estonia, Germany, Hungary, Italy, the Netherlands, Portugal, Slovenia and Spain for the minutes of COREPER and the Justice and Home Affairs Council regarding the Regulations on Service of Documents and Taking of Evidence in civil or commercial matters, 28 November 2019

Documents on Customs IT systems

- Regulation (EU) No 1294/2013 of the European Parliament and of the Council of 11 December 2013 establishing an action programme for customs in the European Union for the period 2014-2020 (Customs 2020) and repealing Decision No 624/2007/EC
- Evaluation of the electronic customs implementation in the EU, Final report 21 January 2015
- Electronic Customs Multi-Annual Strategic Plan 2017 REVISION MASP Rev. 2017 Version 1.4 + ANNEX 3 Governance Scheme, 30.11.2017
- Council Conclusions on the way forward of developing customs IT systems (2018/C 4/02), January 2018
- Report from the Commission to the European Parliament and the Council on the IT strategy for customs, COM(2018) 178 final, 11.4.2018
- Communication from the Commission to the Council and the European Parliament – First Biennial Report on Progress in Developing the EU Customs Union and its Governance, COM(2018) 524 final, 5.7.2018
- 2017 e-Customs Progress Report, TAXUD.B.1(2018) 4316051, 09/10/2018
- A series of delays in Customs IT systems: what went wrong? European Court of Auditors Special Report N° 26, October 2018
- Mid-term evaluation of the Customs 2020 programme, Final report, January 2019
- Report from the Commission to the European Parliament and the Council on the mid-term evaluation of the Customs 2020 programme, COM(2019) 57 final, 7.2.2019
- Commission Staff Working Document - Mid-term evaluation of Regulation (EU) No 1294/2013 of the European Parliament and of the Council of 11 December 2013 establishing an action programme for customs in the European Union for the period 2014-2020 (Customs 2020) and repealing Decision No 624/2007/EC, SWD(2019) 14 final, 7.2.2019
- Commission Staff Working Document - Customs 2020 Programme - Progress Report 2017, SWD(2019) 153 final, 1.4.2019
- 2018 e-Customs Progress Report, TAXUD.B.1(2019) 4239640, 13 June 2019

Other documents:

- e-Sens Proposal for a European IT Governance Model, March 2017
- High-level expert group on information systems and interoperability - Final report, May 2017
- Opinion 4/2018 on the Proposals for two Regulations establishing a framework for interoperability between EU large-scale information systems, European Data Protection Supervisor, 16 April 2018

Appendix 3: Interviews conducted

Stakeholders	Interviewees	Date of interview
eu-LISA	Krum Garkov, Executive Director	16/12/2019
Members of eu-LISA Management Board	DE: Johann Jergl, Federal Ministry of the Interior FI: Tapio Aaltonen, Ministry of the Interior FR: Emmanuel Dupuis, Ministry of the Interior (interviewed together with Bernard Calce, Directorate-General of Customs and Indirect Taxes and Aurélien Bouchier, General Secretariat for European Affairs) NL: Peter Mostert, Ministry of Justice and Security	13/01/2020 11/12/2019 16/01/2020 24/01/2020
European Commission – DG HOME	Matthias Oel, Director, Directorate B - Borders, Interoperability and Innovation and Marc Sulon, Head of Unit B3 Information Systems for Borders, Migration and Security	13/01/2020
European Commission – DG TAXUD	Paulo Santos, Director Directorate B - Digital delivery of Customs and Taxation Policies	16/01/2020
European Commission – DIGIT	Emanuele Baldacci, Director Directorate D Digital Services, and Acting Head of Unit D3 - Trans-European Services	08/01/2020
European Commission – DG JUST	Cristian Nicolau, Head of Unit B4 - e-Justice, IT and Document Management Dick Heimans, Deputy Head of Unit B1 - General criminal law and judicial training (interviewed together with Tomasz Debski, Project Manager)	26/02/2020 23/03/2020
Eurojust	Martin Gillen, Head of Data Management Unit and Roberto Lenti, Head of Resources Department	24/02/2020
Europol	Marcello Fini, Head of Information & Communications Technology Department	07/02/2020
ENISA	Steve Purser, Head of Core Operations	18/02/2020
e-CODEX Consortium	Martin Laufen, e-CODEX Project Coordinator, Ministry of Justice of North Rhine-Westphalia, Germany	11/02/2020

European Court of Auditors	Alberto Gasperoni, Principal Manager, Chamber V Financing and administering the Union and José Parente, Head of Task, Chamber V Financing and administering the Union	19/12/2019
Austrian Federal Computing Centre (BRZ)	Robert Behr, Head of Product Management Justice	20/03/2020

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