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**NOTA**

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minn: Presidenza  
lil: Kumitat tar-Rappreżentanti Permanenti/Kunsill

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Sugġett: *Thejjiġa tal-Kunsill Kompetittività tas-26 ta' Novembru 2021*  
Immaniġġjar tat-Traffiku fl-Ispazju  
*Rapport tal-Presidenza*

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Id-delegazzjonijiet isibu fl-Anness rapport tal-Presidenza dwar l-Immaniġġjar tat-Traffiku fl-Ispazju bil-ħsieb tal-preżentazzjoni fil-Kunsill Kompetittività - parti dwar l-Spazju fis-26 ta' Novembru 2021.

**KUNSILL KOMPETITTIVITÀ - SUQ INTERN, INDUSTRIJA, RIĊERKA U SPAZJU - 26  
ta' Novembru 2021**

**Rapport tal-Presidenza  
*Immaniġġjar tat-Traffiku fl-Ispazju***

**I. Introduzzjoni – Sfond għall-STM**

Is-settur spazjali qed jevolvi lejn paradigma ġdida, ikkaratterizzata minn intensifikazzjoni tal-attivitajiet spazjali madwar id-dinja, il-ħolqien ta' kunċetti ġodda, atturi ġodda, teknoloġiji ġodda, modi ġodda ta' operat u missjonijiet ġodda li huma kritiċi għas-sikurezza. Ghalkemm it-teknoloġiji u s-servizzi innovattivi jgħibu benefiċċji kbar għall-umanità kollha, dawn johlqu sfida għas-sostenibbiltà fit-tul tal-ispazju extratmosferiku. B'mod partikolari, il-konsegwenza ta' dawn l-iżviluppi hija zieda sinifikanti fit-traffiku fl-ispazju, ir-riskji ta' kollizzjonijiet u skart spazjali – u b'hekk johlqu sfida għas-sikurezza tal-attivitajiet spazjali u l-aċċess għall-ispazju.

Għalhekk, mingħajr preġudizzju għall-eżerċizzju mill-Istati Membri tal-kompetenza tagħhom, l-UE għandha tistabbilixxi l-pożizzjoni tagħha dwar l-Immaniġġjar tat-Traffiku fl-Ispazju (STM). Il-konsolidazzjoni ta' pożizzjoni tal-UE hija prerekwizit qabel ma din il-pożizzjoni tal-UE tiġi espressa f'fora oħra u qabel l-istabbiliment ta' pożizzjoni komuni tal-UE ma' pajjiżi terzi u organizzazzjonijiet internazzjonali. Pożizzjoni koerenti tal-Istati Membri titqies ukoll bħala ingranaġġ importanti biex jiġu influwenzati d-diskussjonijiet internazzjonali dwar din il-kwistjoni, b'mod partikolari fil-COPUOS tan-NU.

Minkejja li ġie diskuss b'mod intensiv f'diversi livelli, il-kunċett tal-STM għadu ma ngħatax definizzjoni ċara, preċiża u maqbulha<sup>1</sup> fil-livell globali jew tal-UE. Barra minn hekk, *il-kontenut tal-azzjonijiet futuri* u l-livell ta' implimentazzjoni tagħhom għal STM effiċjenti (nazzjonali, Ewropew, globali) mhux biss għandhom iwieġbu għall-attivitajiet li qed jiżdiedu fis-settur spazjali iżda wkoll jantiċipaw il-bidliet sinifikanti tiegħu, u l-ħtieġa li jiġu definiti fil-livell tal-UE wkoll.

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<sup>1</sup> Aktar dettalji dwar id-definizzjonijiet proposti minn partijiet ikkonċernati differenti fir-Rapport tal-ESPI Lejn Approċċ Ewropew għall-Immaniġġjar tat-Traffiku fl-Ispazju, Jannar 2020

L-iżgurar tas-sostenibbiltà fit-tul tal-ispazju extratmosferiku kif ukoll ambjent sigur u sikur kemm għall-assi (infrastruttura) kif ukoll għan-nies huwa kruċjali biex l-Ewropa tiggarrantixxi mhux biss l-aċċess għall-ispazju iżda wkoll użu sostenibbli tiegħu.

L-Immaniġġjar tat-Traffiku fl-Ispazju (STM) huwa wieħed mill-proġetti ewlenin tal-*Pjan ta' Azzjoni tal-Unjoni dwar sinerġiji bejn l-industrija ċivili, tad-difiża u tal-ispazju*<sup>2</sup>. Il-proġett ewlieni għandu l-għan li jżviluppa standards u regoli STM, meħtieġa biex jiġu evitati avvenimenti ta' kollizjoni li jistgħu jirrizultaw mill-proliferazzjoni ta' satelliti u skart spazjali, biex jiġi evitat li l-istandards mhux tal-UE jsiru n-norma u biex jikkontribwixxi għall-bini ta' approċċ internazzjonali għall-STM fil-futur.

*Żewġ dokumenti informali dwar l-STM* mis-servizzi tal-Kummissjoni mmirati biex jirċievu l-fehmiet tal-Istati Membri tal-UE dwar l-STM inkluż dwar il-kapaċitajiet, l-attivitajiet (teknici, legali, ta' koordinazzjoni u governanza) u l-livell tal-implimentazzjoni tagħhom intbagħtu lill-Istati Membri u ġew diskussi fil-Grupp ta' Ħidma dwar l-Ispazju, rispettivament matul il-Presidenza Finlandiża fit-tieni nofs tal-2019 u l-Presidenza Portugiża fl-ewwel nofs tal-2021.

Diversi attivitajiet ta' riċerka tnedew fil-livell tal-UE. Il-Parlament Ewropew approva proġett pilota dwar l-STM u bħalissa qed jitwettqu żewġ azzjonijiet ta' koordinazzjoni u appoġġ fi ħdan il-qafas ta' Orizzont 2020.

Skont id-Dibattitu ta' Politika "Lejn pożizzjoni aħjar tal-UE fl-immaniġġjar tat-Traffiku fl-Ispazju" fil-Kunsill Kompetittività tat-28 ta' Mejju 2021, il-Ministri qablu li kien hemm ħtieġa urġenti li jiġi żviluppat approċċ tal-UE dwar l-STM u approvaw pjan direzzjonali lejn dak l-għan, żviluppat mill-Presidenza Portugiża fi ħdan it-Triju ta' Presidenzi tal-Kunsill mal-Ġermanja u s-Slovenja, flimkien ma' Franza u f'kooperazzjoni mal-Kummissjoni.

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<sup>2</sup> COM(2021)70 tat-22 ta' Frar 2021.

Il-Presidenza Slovena tal-Kunsill komplet taħdem biex tipprovdi Rapport tal-Presidenza skont il-konklużjonijiet tal-Kunsill dwar l-"Orjentazzjonijiet dwar il-kontribut Ewropew fl-istabbiliment ta' prinċipji ewlenin għall-ekonomija spazjali globali" tal-11 ta' Novembru 2020<sup>3</sup> u kkonfermati mill-għaxar Kunsill Spazjali UE-ESA. Hemmhekk, il-Ministri responsabbli għall-ispazju rakkomandaw approċċ koerenti dwar l-STM fl-Ewropa, inkluż l-organizzazzjoni ta' konferenza Ewropea ddedikata biex jiġi diskuss l-eżerċizzju ta' mmappjar tal-oqfsa regolatorji attwali fl-Ewropa.

Wara dan l-approċċ olistiku, il-Grupp ta' Ħidma dwar l-Ispazju ddiskuta l-elementi meqjusa essenzjali sabiex jintlaħaq qbil komuni dwar l-STM.

## **II. Diskussjonijiet dwar l-STM tal-UE matul il-Presidenza Slovena**

L-STM hija waħda mill-prijoritajiet tal-Presidenza Slovena.

Jeħtieġ li l-UE jkollha vizjoni ċara dwar kif tiżviluppa politiki, regolamenti u teknoloġiji għall-STM sabiex tiproteġi liċ-ċittadini Ewropej, l-infrastruttura u l-operazzjonijiet spazjali Ewropej sabiex tikkontribwixxi u tinfluwenza b'mod proattiv id-diskussjonijiet globali li għandhom l-għan li jiksibu approċċ internazzjonalment aċċettabbli.

*Il-Konferenza Ewropea dwar l-Immaniġġjar tat-Traffiku fl-Ispazju (STM) "It-Trawwim ta' Approċċ Ewropew dwar l-Immaniġġjar tat-Traffiku fl-Ispazju"* ġiet organizzata fis-7 ta' Lulju 2021 waqt il-Presidenza Slovena - f'konformità mal-pjan direzzjonali maqbul imsemmi hawn fuq, bil-għan li tiġi definita l-pożizzjoni Ewropea dwar l-STM matul l-2022. Ir-rappreżentanti tal-Istati Membri tal-UE u l-Aġenzija Spazjali Ewropea (ESA), il-Kummissjoni, is-Servizz Ewropew għall-Azzjoni Esterna (SEAE) u l-Eżekuttiv tal-ESA enfasizzaw diversi elementi, atturi u prospettivi rilevanti għat-trawwim ta' pożizzjoni Ewropea dwar l-STM.

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<sup>3</sup> 12851/20

Id-diskussjonijiet matul it-tnejn tal-Konferenza, li inkludew seduta ta' smigh u mmappjar tal-kapaċitajiet u l-lakuni Ewropej, jirrapprezentaw parti mill-pjan direzzjonali mmirat lejn it-tfassil ta' approċċ Ewropew unifikat inizjali lejn l-STM.

Il-partijiet ikkonċernati tal-konferenza STM laqgħu *dokument mhux vinkolanti bil-miktub – Eżiti tal-Konferenza Ewropea dwar l-immaniġġjar tat-Traffiku fl-Ispazju bit-titolu "It-Trawwim ta' approċċ Ewropew dwar l-Immaniġġjar tat-Traffiku fl-Ispazju"* bħala kontribut għad-dibattitu ulterjuri tal-STM fl-Ewropa.

L-*eżiti* jenfasizzaw il-fehmiet espressi mid-delegazzjonijiet mill-Istati Membri tal-UE u l-ESA, il-Kummissjoni, is-SEAE u l-ESA dwar ir-rilevanza tal-STM għall-Ewropa, is-sitwazzjoni attwali, il-ħtiġijiet u l-atturi li jikkontribwixxu għal Approċċ Ewropew għall-STM, kif ukoll l-attivitajiet meħtieġa fl-oqsma teknoloġiċi u regulatorji li jeħtieġ li jittiehdu biex l-Ewropa tilhaq narrattiva komuni dwar l-STM.

Intwera b'mod ċar li approċċ koerenti fil-qasam tal-STM fil-livell tal-UE huwa kruċjali biex ikun hemm reazzjoni għall-isfidi globali.

Pass importanti biex ikompli jiġi żviluppat l-approċċ komuni tal-UE dwar l-STM kien it-tnedija tal-Pjattaforma ta' Konsultazzjoni f'Settembru 2021 mid-DĠ DEFIS. Il-Pjattaforma għandha l-għan li sservi bħala mekkaniżmu trasparenti biex tipprovdi kontribut għal Komunikazzjoni mill-Kummissjoni dwar approċċ tal-UE dwar l-STM, ippjanat għall-bidu tal-2022.

Id-diskussjonijiet li saru matul il-Presidenza Slovena fl-SWP enfasizzaw il-ħtieġa li titkompla l-ħidma fuq l-elementi kollha tal-approċċ tal-STM tal-UE, bil-għan li tintlaħaq pożizzjoni komuni għal dawn il-kwistjonijiet matul il-Presidenza Franċiża tal-Kunsill fl-2022.

### **III. L-eżiti preliminari tad-diskussjonijiet tal-Istati Membri**

L-Istati Membri esprimew b'mod ċar il-ħtieġa imperattiva li jiġi indirizzat l-STM fil-livell Ewropew għall-preservazzjoni tal-interessi tal-UE fl-aċċess u l-użu tal-ispazju b'mod awtonomu, sigur u sikur u għall-promozzjoni tal-kompetittività tal-industrija Ewropea.

Il-hafna attivitajiet li nbdeu matul l-aħħar presidenzi wittew it-triq għal fehim aħjar tal-kunċett tal-STM. Offra wkoll l-opportunità li jingabru l-pożizzjonijiet tal-Istati Membri tal-UE dwar din il-kwistjoni urġenti. L-elementi ewlenin li ħarġu minn dawn id-diskussjonijiet huma dawn li ġejjin:

L-ewwel nett, l-Istati Membri ddikjaraw l-importanza li jirrispettaw il-kompetenzi tal-Istati Membri. Huma għandhom l-intenzjoni li jibqgħu responsabbli għall-iżvilupp, is-supervizjoni u l-infurzar tar-regoli tal-STM. Huma jqisu li l-margni ta' manuvra tal-Unjoni Ewropea għandu jkun kompletament konformi mal-Artikoli 4(3) u 189 TFUE. Hemm ukoll rieda ċara espressa mill-Istati Membri li jimmonitorjaw mill-qrib u jidderieġu l-iżviluppi tal-STM. Għal dik ir-raġuni, l-UE għandha ssegwi u tikkoordina l-azzjonijiet tal-UE għall-użu sostenibbli tal-ispazju u tirrapporta l-attivitajiet kollha għall-iżgurar tat-trasparenza. Għandu jkun hemm kooperazzjoni tal-atturi Ewropej rilevanti kollha skont ir-rwoli u r-responsabbiltajiet rispettivi tagħhom biex tiġi evitata d-duplikazzjoni mhux meħtieġa tal-isforzi.

It-tieni nett, ir-rwol tal-Unjoni Ewropea għandu jikkonċentra fuq l-iżvilupp ta' standards u liġijiet mhux vinkolanti, inkluż miżuri ta' rakkomandazzjoni jew incentivi, fejn meħtieġ. Barra minn hekk, xi Stati Membri indikaw li l-obbligi vinkolanti fil-livell tal-UE ma għandhomx jiġu esklużi. Element importanti li għandu jitqies, fil-qasam tal-STM, huwa li kwalunkwe miżura adottata jew promossa fil-livell tal-UE m'għandhiex toħloq piżijiet bla bżonn għall-industrija tal-UE u għandha tikkontribwixxi għall-objettiv komuni li tiġi żgurata s-sostenibbiltà fit-tul tal-attivitajiet tal-ispazju extratmosferiku u li tinzamm il-libertà għall-esplorazzjoni paċifika u l-użu tal-ispazju extratmosferiku anke għall-ġenerazzjonijiet futuri.

It-tielet nett, abbażi tal-aħħar sitt snin ta' attivitajiet, l-SST tal-UE għandha tkun fuq quddiem tal-attivitajiet operazzjonali u ta' riċerka kollha relatati mas-Sorveljanza u l-Insewiment fl-Ispazju. Il-kapaċitajiet tal-SST u tal-SSA huma kruċjali fl-iżvilupp tal-STM, peress li dan huwa l-uniku mod biex jiġu evitati l-kollizzjonijiet operazzjonalment u biex wieħed isir attur kredibbli dwar din il-kwistjoni.

Fl-aħħar nett, l-Istati Membri huma konxji li l-iżvilupp ta' approċċ Ewropew mhux ser isolvi t-tħassib kollu mqajjem mill-ġhadd akbar ta' satelliti u skart spazjali. Twegiba internazzjonali biss tista' twassal għall-iżvilupp ta' approċċ STM effiċjenti u approċċ komuni tal-UE jippermetti lill-UE żżid il-piż internazzjonali tagħha f'dan il-qasam. Il-ħidma mibdija mill-UNCOPUOS permezz tal-linji gwida tal-LTS tal-21 hija pass importanti fid-direzzjoni t-tajba. B'hekk l-impenn kontinwu mas-sħab/organizzazzjonijiet internazzjonali, inkluż l-UNCOPUOS, ser ikun kruċjali biex jiġi żgurat li l-approċċ Ewropew miżjud u kkoordinat jikkontribwixxi għad-diskussjonijiet internazzjonali tal-STM, sabiex jinkiseb approċċ internazzjonalment aċċettabbli. L-UE għandha tippromwovi wkoll l-iżvilupp ta' miżuri ta' inċentiv sabiex trawwem l-implimentazzjoni ta' miżuri adottati fil-livell internazzjonali. Dan jista' jitqies bħala l-ewwel pass qabel l-adozzjoni futura possibbli ta' strumenti internazzjonali legalment vinkolanti. Biż-żieda fit-traffiku fl-ispazju, fuq perijodu ta' żmien medju u twil, l-istrumenti legalment vinkolanti ser jipprovdu l-istabbiltà meħtieġa u l-bażi normattiva għal attivitajiet sikuri u sostenibbli fl-ispazju extratmosferiku.

#### **IV. It-triq 'il quddiem**

Wara l-Komunikazzjoni tal-Kummissjoni dwar l-approċċ tal-UE dwar l-STM ippjanat għall-bidu tal-2022, ser jiġi stabbilit proċess ta' eżami mill-Presidenza FR biex jiġu permessi diskussjonijiet estensivi fil-Grupp ta' Ħidma dwar l-Ispazju (SWP) bl-ambizzjoni li tiġi definita l-pożizzjoni tal-UE dwar l-STM matul il-presidenza FR.

L-Istati Membri ser jiddiskutu approċċ olistiku tal-mistoqsija multidimensjonali tal-STM. Dan jinkludi l-iżvilupp ta' kapaċitajiet, regolatorji, ta' politika, ta' riċerka u innovazzjoni, ta' bini tal-kapaċitajiet, ta' elementi legali u operazzjonali f'livelli differenti inkluż aspetti ċivili u militari, filwaqt li tiġi żgurata l-komplementarjetà fl-oqsma kollha tal-impenn spazjali tal-UE.

Biex tpoġġi lill-UE f'pozizzjoni b'saħħitha, l-Unjoni teħtieġ livell adegwat ta' awtonomija fis-settur spazjali, inkluż dwar l-STM. Dan jeħtieġ il-bini tal-kapaċità, li hija prerekwizit essenzjali għal kwalunkwe mmaniġġjar u koordinazzjoni tat-traffiku fl-ispazju.

L-UE diġà bniet waħda mill-aktar sistemi komprensivi ta' Sorveljanza u Insekwiment fl-Ispazju (SST) fid-dinja, li għandha potenzjal kbir li ssaħħah l-awtonomija tal-UE fir-rigward tal-SST. Il-konsorzju tal-EU SST, li ser isir sħubija akbar sa tmiem l-2021, iwettaq attivitajiet ta' riċerka u innovazzjoni, żvilupp tal-kapaċitajiet u jipprovdi servizzi operazzjonali 24/7 b'has-servizz għall-Evitar tal-Kollizzjonijiet għall-biċċa l-kbira tas-satelliti Ewropej (228). Fix-xhur li ġejjin, ser ikun essenzjali li jissahhu l-kapaċitajiet u l-ħiliet tal-UE f'termini ta' għarfien (SSA) u sorveljanza (SST) tal-ambjent spazjali, jizdiedu l-għadd u l-prestazzjoni tas-servizzi u jintlaħqu aktar utenti potenzjali biex titjeb il-koordinazzjoni tat-traffiku fl-ispazju u jiġu żgurati operazzjonijiet sikuri fl-ispazju.

F'termini ta' regolamentazzjoni, biex jiġi żgurat spazju sikur u sigur u jingħata kontribut għas-sostenibbiltà fit-tul tal-attivitajiet fl-ispazju extratmosferiku, l-Istati Membri għandhom jiddiskutu approċċ prammatiku u effettiv billi jimmiraw, fuq terminu immedjat, lejn objettivi realistiċi. Tabilhaqq, jidher diffiċli li jsir progress fi żmien qasir dwar kwalunkwe qafas regolatorju internazzjonali legalment vinkolanti għall-immaniġġjar tat-Traffiku fl-Ispazju. L-Istati Membri għandhom jappoġġaw l-implimentazzjoni tal-linji gwida volontarji eżistenti (LTS) adottati fil-qafas tal-COPUOS (u biex jadottaw miżuri nazzjonali f'din id-direzzjoni) u approċċ konsistenti tal-UE fin-NU dwar l-iżvilupp ta' mġiba responsabbli jista' jkun l-ewwel pass utli.

Fil-futur qarib, l-UE għandha tgħin fil-bini ta' fehim komuni ta' dak li jinkludi l-STM, u tikkontribwixxi biex jintlaħaq kunsens għall-iżvilupp ta' normi u standards komuni. Dan l-iżvilupp għandu fi kwalunkwe każ ikun prammatiku, gradwali u inkrementali u bbażat fuq il-prinċipju tar-reċiproċità ta' dawk in-normi u l-istandards, sabiex ma tiġix ippenalizzata l-kompetittività tal-industrija spazjali Ewropea, u d-dimensjoni doppja tal-STM għandha titqies kif xieraq.

Skont il-livell ta' konvergenza fid-diskussjonijiet dwar is-sugġetti differenti, ser tithejja Nota tal-Presidenza jew konkluzjonijiet tal-Kunsill dwar pożizzjoni tal-UE dwar l-STM li tista' tigi adottata matul il-Kunsill Kompetittività ta' Ġunju 2022 mill-presidenza FR. Din il-ħidma ser issir f'koordinazzjoni mill-qrib mas-sħubija tal-EU SST.

### *Annessi*

1. L-eżiti tal-Konferenza Ewropea dwar l-Immaniġġjar tat-Traffiku fl-Ispazju, 7 ta' Lulju 2021 "Trawwim ta' Approċċ Ewropew għall-Immaniġġjar tat-Traffiku tal-Ispazju";
2. Abbozz ta' pjan direzzjonali għad-dokument ta' sfond bil-ħsieb tad-dibattitu ta' orjentazzjoni fil-Kunsill Kompetittività - parti dwar l-Spazju fis-17 ta' Mejju 2021 (8616/21 ADD1).

*Outcomes of the European Space Traffic Management Conference, 7 July 2021*

*"Fostering a European approach to Space Traffic Management"*

**Outcomes**

**of the European Space Traffic Management Conference, 7 July 2021 "Fostering a European approach on Space Traffic Management"**

Representatives of Member States of EU and ESA, together with representatives of the European Commission, the European External Action Service and the Executive of the European Space Agency met at the European Space Traffic Management (STM) Conference on 7 July 2021.

The Conference was initiated by orientations affirmed by the EU-ESA Space Council of 20 November 2020 on the European contribution in establishing key principles for the global space economy. There, Ministers responsible for space from EU and ESA Member States recommended a coherent approach on STM in Europe including to hold a dedicated European conference to discuss the mapping exercise of current regulatory frameworks in Europe.

The Conference was prepared in an informal process encompassing the representatives of the Member States of EU and ESA, as well as representatives of the European Commission, the European External Action Service, and the Executive of the European Space Agency. This process included a Hearing on STM that took place on 24 March 2021, at the occasion of which EU and ESA Member States, space agencies, the EU Space Surveillance and Tracking (SST) Consortium/Partnership, industry, academia and Europe's international partners presented their views on space traffic management, thus highlighting the various elements and actors and perspectives relevant to fostering a European position on STM. Based on the Hearing a mapping of European capabilities and gaps was carried out on 21 April 2021.

In the development of a European position on STM, continued engagement with international partners/organisations like UNCOPUOS will be key in ensuring that the increased coordinated European approach contributes to international STM discussions, in order to achieve an internationally acceptable approach.

The Conference noted with appreciation the European Union roadmap for STM, which was discussed at the EU Competitiveness Council (SPACE) on 28 May 2021.

The following Outcomes of the Conference are not binding to any participant, the Presidencies or institution but are offered as a contribution to the STM debate in Europe.

## 1. Relevance of Space Traffic Management for Europe

- (1) Space Traffic Management is a very complex topic under the remit of multiple levels of competences from the multilateral United Nations, to the European actors and national governments. It requires action at multiple dimensions that need to be addressed through a close involvement of all relevant European actors, such as: i) research and innovation activities; ii) development of capabilities; as described in chapters 2 and 3, iii) operational coordination services iv) regulatory activities including standardization, v) security and dual dimension.
- (2) Orbits are increasingly congested and contested. They constitute a limited natural resource. The dynamic evolution of space activities and the increasing emergence of a near-Earth ecosystem as an economic domain, attracting additional actors and investments, including from the commercial sector, and leading to the development of innovative applications and technologies is noted.
- (3) There is an increase in space traffic and collision risks, thus challenging the safety of space activities, access to space, and the long-term sustainability (LTS) of outer space.
- (4) Ensuring the long-term sustainability of outer space as a safe and secure environment is a prerequisite for Europe to access and utilize outer space, as space data and applications are increasingly important for our societies as a whole and for implementing European Union and national policy objectives such as the digital and green transition and for socio-economic, security and defence goals. Moreover, the protection of European citizens and their Member States is a prerequisite to achieve at the earliest stage of any STM development.
- (5) The need for ESA, the EU, and their respective Member States to foster a common approach on STM in order to react to the global challenges and to contribute to ongoing international discussions on STM is highlighted.
- (6) A European contribution to the formulation of future international norms and standards related to STM as well as an increased coordinated approach and cooperation are of primary importance for preserving European interests in accessing and using space, public and private space infrastructure and to promote the competitiveness of the European industry and for contributing to a level-playing field for the global space economy.
- (7) Europe should continue to foster its status as a role model for responsible behaviour in space.

## 2. State of Play and Needs

- (1) STM constitutes a multi-dimensional concept encompassing legal, regulatory, policy, research and innovation, development of capabilities legal and operational elements at different levels. The civil, commercial, technological, security, and dual-use aspects should be duly taken into account.
- (2) A comprehensive approach is necessary in fostering a European approach to STM, for which the mapping presented at the occasion of the Preparatory Meeting for the European Conference on Space Traffic Management on 21 April 2021 could be useful, identifying specific needs for action as a valuable tool for facilitating a structured approach towards shaping a European position on STM as well as the on-going research activities launched by European Actors such as the two ongoing H2020 STM actions and the EU SST Consortium/Partnership by the European Commission, an STM pilot project commissioned by the European Parliament, and the ongoing ESA Space Safety Programme.
- (3) Europe should make use of all its resources and capabilities and bundle them in the most effective and efficient way, involving different EU, ESA, and national authorities and their contributions and responsibilities in their respective fields.
- (4) In order to assess the needs to establish adequate coordination interfaces with air traffic management, a coordination with in particular International Civil Aviation Organization (ICAO), European Union Aviation Safety Agency (EASA), Eurocontrol and International Telecommunication Union (ITU) could be promoted.
- (5) In order to ensure the safety, security and long-term sustainability of outer space activities, international coordination and technical standards as well as rules with universal applicability, in accordance with international space law become necessary, and in this case European Member States need to actively contribute to such development and its implementation in a coherent way.
- (6) Europe should work on the implementation of the existing voluntary LTS guidelines adopted by UNCOPUOS and could develop standards and good practices; this development would be gradual and incremental and should be based on the principle of reciprocity, so as not to penalize the competitiveness of the European space industry, and taking into account strategic issues as well. As a long-term goal, Europe should strive to contribute to further consideration of an international regulatory framework on STM in collaboration with other nations and international organisations which might encompass as appropriate legal or voluntary instruments worked out within international organisations such as UNCOPUOS.
- (7) Europe needs to promote its technological leadership to enhance the safety and sustainability of its space activities and reap the benefits of developing markets and fully use the opportunities provided by commercial capabilities and services, including as regards in-orbit servicing, active debris removal, space debris mitigation (with for example spacecraft design elements), space surveillance and tracking, space weather, and near-Earth objects.
- (8) European and national SST capabilities are a prerequisite to any burden sharing, as well as an essential basis to monitor space objects and provide SST services related to space traffic. European and national investments in SST are therefore of capital importance.

### 3. Actors Contributing to a European Approach to Space Traffic Management

- (1) The development of a comprehensive, coherent and jointly developed European approach on STM to contribute to the global discussion necessitates the inclusive involvement of all relevant actors, Member States of EU and ESA, the European Commission, the European External Action Service, the ESA Executive, the EU SST Consortium/Partnership, regulatory authorities, academia, industry, including service providers and civil society, based on the actors' competences, roles, and capabilities.
- (2) The imperative role of Member States of EU and ESA in shaping the way forward due to the security, sovereignty and dual dimension of STM and the EU and ESA Member States' authority over their SST sensors needs to be taken into account. Other national initiatives and research and development through the ESA programmes should also be considered in the European approach in the future too. Also, the EU and ESA Member States' responsibilities under the United Nations treaties need to be taken into account.
- (3) The EU SST programme is for EU member states the primary research and innovation capability development and operational capability for monitoring and coordinating space traffic through the SST Services (collision avoidance, re-entry, fragmentation, remediation and mitigation) as well as for providing services to institutional and commercial stakeholders, public and private, civil and military ones.
- (4) The role of the European Commission should be emphasized in the implementation of the EU space programme, in particular with the SST sub-component which could contribute to a European STM, and other EU space activities in accordance with the EU treaties and international law. The European Commission is also announcing STM as one of the three flagship initiatives, stemming out of its Action Plan on Synergies between civil, defence and space industries. EU Member States have also provided, through the EU Competitiveness Council (SPACE), guidance for developing a European Union approach for STM. The European Commission was encouraged to prepare the declaration of acceptance of the rights and obligations under the United Nations space treaties, where applicable.
- (5) ESA provides essential contributions and programme expertise in research and collaborative development and implementation of large European systems and also develops operational prototypes and precursor services in its Space Safety Programme. Furthermore, ESA performs research and development, in particular in the areas of in-orbit servicing, space debris mitigation, active debris removal, space weather, and near-Earth objects and sensor development, which could contribute to a European STM. ESA also has a strong and long experience in contributing in different international forums as the Inter-Agency Space Debris Coordination Committee (IADC).
- (6) An active involvement of European space industry including the downstream sector and service providers, financial service providers such as insurers, regulatory authorities, research establishments, academia, and civil society is important for the future development of technical, operational rules and standards in order to promote effective solutions and increase the European competitiveness and technological leadership.
- (7) The collaboration between the EU standardization organisations European Committee for Standardization (CEN), European Committee for Electrotechnical Standardization (CENELEC), European Telecommunication Standardization Institute (ETSI) and the European Cooperation for Space Standardization (ECSS) should be further strengthened as an important platform for the development of standards relevant to STM. ESA, Member States of ESA and

EU and European industry have a strong experience in standard setting by contributing in different international forums like ECSS, CEN, CENELEC, International Organization for Standardization (ISO) and European Organisation for Civil Aviation Equipment (EUROCAE).

#### 4. Way Ahead

(1) The Conference welcomed the consensus reached at the occasion of the EU Competitiveness Council (SPACE) on 28 May 2021 on a European Union roadmap contributing to the way forward on a European position on Space Traffic Management and welcomed the further development of a step-wise European approach for a coherent and inclusive way ahead with all competent actors in particular EU, ESA and all their respective Member States.

*Draft roadmap on Space Traffic Management*

*Competitiveness Council - Space part on 17 May 2021 (8616/21 ADD1)*

- i) Preparatory (2019-Q2- 2021);
- ii) Design and definition (Q3 2021-Q2 2022);
- iii) Outreach (Q4 2022)

	Date	Meeting	Topics	Documents/outputs	
				EU	ESA
	03/16	UNCOPUOS	UNCOPUOS Legal Subcommittee puts STM on its agenda		UN.Doc. A/AC105/C.2/2015/CRP.13
<b>PREPARATORY PHASE</b>					
Preparatory phase	22/10/19	SWP	<p>COM submitted non-paper centred on new developments on a non-consensual definition for STM and the need for sustainability of Space.</p> <p>MS informed about national competences and lack of national positions</p>	<p>COM non-paper – State of play on STM (WKS 11506/19) and questionnaire (11512/19)</p> <p>Need to enhance knowledge from MS on STM and positions</p>	

	14/01/20 and 12/05/20	Workshops in preparation of the German EU Council Presidency	Initiative "Establishing key principles for the global space economy" with one focus topic on STM	Presentations leading to Council Conclusions/ESA Resolution
	Autumn 2020	Studies for knowledge-base building launched by COM	<p>2 Coordination and Support Actions</p> <p>1. building STM capability.(01/21-08/22)</p> <p>2. European industry competitiveness and economic sustainability (01/21-06/22),</p> <p>3. Pilot project on legal and economic analysis(WK 2189/21 (01/21-01/22))</p>	
	20/11/20	10th Space Council EU-ESA	Increase European coordinated approach, from a dialogue with stakeholders for <b>mapping exercise of regulatory framework in Europe to be discussed in a European Conference</b>	<p>Council Conclusions (doc. 12851/20 - paras 14-15)/ESA Resolution</p> <p>To be taken forward in the respective settings</p>

	5/01/21	SWP	PRES informed about the new developments on STM	COM presentation on ISO standardisation (WK 57/21)	
	28/01/21	1st meeting of the preparatory group organised by DE	German initiative to put forward the steps included in the Space Council	Presentation Exploration of concept and roles with stakeholders	

	16/02/21	SWP	<p>COM presented the scope of the two Coordination and Support Actions, and the Pilot project.</p> <p>PCY and COM presented coordinated Roadmap based on non-paper to identify major European issues for a European common approach and expecting for the mapping from the two pilots</p>	<p>2 Coordination and Support Actions</p> <p>1. building STM capability.(01/21-08/22)</p> <p>2. European industry competitiveness and economic sustainability (01/21-06/22),</p> <p>3. Pilot project on legal and economic analysis(WK 2189/21 (01/21-01/22))</p>	
	23/02/21	2nd meeting of the preparatory group organised by DE	Explore a roadmap towards the conference based on hearing at global level	Presentation - calendar	Preparation for the conference

	17/03/21	SWP	<p>COM presented non-paper on STM, including a questionnaire.</p> <p>Guiding questions to support MS to form their national position on STM; exchange of views with MS</p>	COM non-Paper and questionnaire to MS	
	24/03/21	<p>3<sup>rd</sup> meeting organised by DE - "Hearing" presentations from MS of the EU and ESA, other third countries, academics and think tanks, industry European and third countries</p>	Presentations to enhance the understanding of participants on STM		

	21/04/21	3rd meeting of the preparatory group organised by DE	Start of the mapping of European "state of play" (European participations in international fora, existing regulations and capabilities)		
	27/04/21	SWP	MS exchange of views on preliminary positions based on replies to Questionnaire	COM Presentation of results & conclusions from questionnaire	
	28/05/21	Competitiveness Council (Space)	Policy debate "Towards a better positioning of the EU in the Space Traffic Management"	Orientation paper on MS preliminary position towards a EU coordinated approach	

	13/05/21	4th meeting of the preparatory group organised by DE	Follow-up of understanding of European "state of play" [and start of examination of technical enhancement]	
	3/06/21	5th meeting of the preparatory group organised by DE	Preparation of the Conference presenting mapping and technical possible future [synergies/common understandings/potential for joint actions] based on identified technical needs	

	7/07/21	<p>Conference, following up on point 15. of CCs doc. 12851/20</p> <p>"to start a European dialogue together with academia and industry, including a mapping exercise of current regulatory frameworks in Europe to be discussed in a dedicated European conference"</p>	<p>The conference will help to develop a common understanding in (1) importance of STM, (2) state-of-play and needs (tech., regulatory, etc.), (3) actors in STM contributing to the STM position-making in Europe</p>	
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DESIGN AND DEFINITION PHASE					
QDesign and definition phase	13/07/21 (tbc.)	SWP	Update by the Commission on STM	STM presentation	
	07/09/21 (tbc.)	SWP	Presentation of the initial results and outputs of the CSAs and the Pilot project	STM presentation	
	21/09/21 (tbc.)	SWP	Presentation of Presidency synthesis of the outcomes from May COMPET – Space policy debate, July's Conference on STM and initial results from CSAs and Pilot project: collecting views of delegations		
	12/10/21 (tbc.)	SWP	Presidency Report on STM: examination		
	26/10/21 (tbc.)	SWP	Presidency Report on STM: final examination		

	Nov/Dec				Poss. to have STM in the ESA Interim Ministerial Meeting (30 Nov-1 Dec, tbc)
	10/11/21	COREPER	Preparation of EU Competitiveness Council (Space)		
	26/11/21	<b>Competitiveness Council (Space)</b>	Tbc.: Presidency Report on STM	MS main highlights on STM to prepare an EU position	
	XX/01/22	COM-EP	Conference with EP, based on pilot project results		
	Q1 2022		Commission formal input towards EU coordinated position on STM	COM formal input	

	?/02/22	SWP	Exchange of views on a draft EU position on STM		
	XX/03/22	SWP	Exchange of views		
	XX/04/22	SWP	Examination of EU position		
	XX/05/22	SWP	Examination of EU position		
	<b>XX/05 or 06/22 (or 9/22)</b>	<b>COREPER</b>	Examination		
	<b>[XX/05/22</b>	<b>EU Competitive ness Council</b>	<b>Adoption of Council Conclusions? or I/A Note on EU position on STM – [Space Council]</b>	<b>EU position on STM</b>	
					<b>Preparation of a programme proposal STM for CM22</b>

OUTREACH PHASE				
Outreach phase	XX/XX/2022	MS-EU (COM + Council) - ESA dialogue		Preparation of an EU-ESA communication plan
	?	<b>MS together with COM, EEAS and ESA - outreach to third countries COPUOS, etc.</b>		

Council work

Commission work

DE work

ESA work (Consultations on 3SOS, work in **CONOP for UN 1<sup>st</sup> Disarmament Committee/and SWP for COPUOS**)

EEAS work (consultations on 3SOS, work in **CONOP for UN 1st Disarmament Committee/and SWP for COPUOS**)