European Parliament
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Committee on Industry, Research and Energy

2015/2276(INI)

29.2.2016

AMENDMENTS
1 - 62

Draft opinion
Marian-Jean Marinescu
(PE575.369v01-00)

on Space capabilities for European security and defence
(2015/2276(INI))

AM_Com_NonLegOpinion

Amendment 1
Clare Moody, Theresa Griffin, Jude Kirton-Darling, Kathleen Van Brempt, Eugen Freund

Draft opinion
Paragraph -1 (new)

Draft opinion	*Amendment*
	-1. Reaffirms the civilian nature of the EU's space policy, and the primacy of EU space programmes as missions to promote scientific progress and industrial competitiveness in accordance with Article 189 of the Treaty of Lisbon;

Or. en

Amendment 2
David Borrelli, Dario Tamburrano

Draft opinion
Paragraph 1

Draft opinion	*Amendment*
1. Highlights the dual-use capacity of Galileo and Copernicus, in the form of the Public Regulated Service and the Copernicus security service; believes this capacity should be fully developed in the next generations, noting especially the need for very high resolution earth observation data (Copernicus) and better precision and encryption (Galileo); calls for sufficient provision in the mid-term review for all satellite systems' future development;	1. Highlights the dual-use capacity of Galileo and Copernicus, in the form of the Public Regulated Service and the Copernicus security service; ***stresses that these projects should pay special attention to civil applications, as it befits their overall design;*** believes this capacity should be fully developed in the next generations, noting especially the need for very high resolution earth observation data (Copernicus) and better precision and encryption (Galileo); calls for sufficient provision in the mid-term review for all satellite systems' future development;

Or. en

Amendment 3

Marian-Jean Marinescu

Draft opinion
Paragraph 1

Draft opinion	*Amendment*
1. Highlights the dual-use capacity of Galileo and Copernicus***, in the form of the Public Regulated Service and the Copernicus security service***; believes this capacity should be fully developed in the next generations, ***noting especially the need for very high resolution earth observation data (Copernicus) and*** better precision and encryption (Galileo); calls for sufficient provision in the mid-term review for all satellite systems' future development;	1. Highlights the dual-use capacity of Galileo and Copernicus; believes this capacity should be fully developed in the next generations, ***for example*** better precision and encryption (Galileo); calls for sufficient provision in the mid-term review for all satellite systems' future development;

Or. en

Amendment 4
Massimiliano Salini, Antonio Tajani

Draft opinion
Paragraph 1

Draft opinion	*Amendment*
1. Highlights the dual-use capacity of Galileo and Copernicus, in the form of the Public Regulated Service and the Copernicus security service; believes this capacity should be fully developed in the next generations, noting especially the need for very high resolution earth observation data (Copernicus) and better precision and encryption (Galileo); calls for sufficient provision in the mid-term review for all satellite systems' future development;	1. Highlights the dual-use capacity of Galileo and Copernicus, in the form of the Public Regulated Service and the Copernicus security service; believes this capacity should be fully developed in the next generations, noting especially the need for very high resolution earth observation data (Copernicus) and better precision and encryption (Galileo); calls for sufficient provision in the mid-term review for all satellite systems' future development; ***points in addition to the importance of considering how industry might be involved in the management of Copernicus operations;***

Or. it

Amendment 5
Dominique Riquet, Carolina Punset

Draft opinion
Paragraph 1

Draft opinion	*Amendment*
1. Highlights the dual-use capacity of Galileo and Copernicus, in the form of the Public Regulated Service and the Copernicus security service; believes this capacity should be fully developed in the next generations, noting especially the need for very high resolution earth observation data (Copernicus) and better precision and encryption (Galileo); calls for sufficient provision in the mid-term review for all satellite systems' future development;	1. Highlights the dual-use capacity of Galileo and Copernicus, in the form of the Public Regulated Service and the Copernicus security service; ***underlines that space programmes have both civil and military benefits, which are technologically linked;*** believes this capacity should be fully developed in the next generations, noting especially the need for very high resolution earth observation data (Copernicus) and better precision and encryption (Galileo); calls for sufficient provision in the mid-term review for all satellite systems' future development;

Or. en

Amendment 6
Flavio Zanonato, Patrizia Toia

Draft opinion
Paragraph 1

Draft opinion	*Amendment*
1. Highlights the dual-use capacity of Galileo and Copernicus, in the form of the Public Regulated Service and the Copernicus ***security service***; believes this capacity should be fully developed in the next generations, noting especially the need for very high resolution earth observation data (Copernicus) and better precision and encryption (Galileo); calls for sufficient provision in the mid-term review for all satellite systems' future	1. Highlights the dual-use capacity of Galileo and Copernicus, in the form of the Public Regulated Service and the Copernicus ***services***; believes this capacity should be fully developed in the next generations, noting especially the need for very high resolution earth observation data (Copernicus) and better precision and encryption (Galileo); calls for sufficient provision in the mid-term review for all satellite systems' future development; ***calls***

development;	***for future better interaction between drones and satellites for civil purposes;***

Or. en

Amendment 7
Cora van Nieuwenhuizen, Morten Helveg Petersen, Dominique Riquet, Philippe De Backer, Fredrick Federley, Carolina Punset, Pavel Telička

Draft opinion
Paragraph 1

Draft opinion	*Amendment*
1. Highlights the dual-use capacity of Galileo and Copernicus, in the form of the Public Regulated Service and the Copernicus security service; believes this capacity should be fully developed in the next generations, noting especially the need for very high resolution earth observation data (Copernicus) and better precision ***and encryption*** (Galileo); calls for sufficient provision in the mid-term review for all satellite systems' future development;	1. Highlights the dual-use capacity of Galileo and Copernicus, in the form of the Public Regulated Service and the Copernicus security service; believes this capacity should be fully developed in the next generations, noting especially the need for very high resolution earth observation data (Copernicus) and better precision***, authentication, encryption, continuity and integrity*** (Galileo); calls for sufficient provision in the mid-term review for all satellite systems' future development;

Or. en

Amendment 8
Constanze Krehl, Clare Moody

Draft opinion
Paragraph 1

Draft opinion	*Amendment*
1. Highlights the ***dual-use capacity*** of Galileo and Copernicus***,*** in ***the form of*** the ***Public Regulated Service and the Copernicus security service***; believes ***this capacity*** should be fully developed in the next generations, noting especially the need for very high resolution earth	1. Highlights the ***importance*** of ***the*** Galileo and Copernicus ***services; points*** in ***this regard to*** the ***civil origin of European space capacity***; believes ***the capacities of these services*** should be fully developed ***and further extended*** in the next generations, noting especially the need for

observation data (Copernicus) and better precision and encryption (Galileo); calls for sufficient provision in the mid-term review for all satellite systems' future development;

very high resolution earth observation data (Copernicus) and better precision and encryption (Galileo); calls for sufficient provision in the mid-term review for all satellite systems' future development;

Or. de

Amendment 9
Constanze Krehl

Draft opinion
Paragraph 1 a (new)

Draft opinion	*Amendment*
	1a. Underlines in this regard that the development of European space capabilities for European security and defence should have two key strategic objectives: security on the planet, i.e. security on the planet through technological space systems in orbit designed to monitor the earth's surface, and security in outer space as well as space safety, i.e. security in orbit and in space through SST systems on the earth's surface and in orbit designed to monitor the orbit and outer space;

Or. de

Amendment 10
Marian-Jean Marinescu

Draft opinion
Paragraph 1 a (new)

Draft opinion	*Amendment*
	1a. Considers that further implementation of the CSDP is needed; reaffirms the need to increase the effectiveness, visibility and impact of the CSDP; reaffirms the importance and the added value of the

Space Policy to the CSDP; considers that Space should be included in future Union policies (e.g. internal security, transport, space, energy, research) and synergies with Space should be further strengthened and exploited;

Or. en

Amendment 11
Michel Reimon
on behalf of the Verts/ALE Group

Draft opinion
Paragraph 1 a (new)

Draft opinion	*Amendment*
	1a. Insists that the provision of Galileo services must be consistent with the principle that Galileo is a civil system under civil control, and that all uses thereof must comply with international law, the UN Charter and the Lisbon Treaty;

Or. en

Amendment 12
Constanze Krehl, Clare Moody

Draft opinion
Paragraph 1 b (new)

Draft opinion	*Amendment*
	1b. Points out that in order to further develop the capacities of satellite-based systems a comprehensive concept of security is needed; emphasises therefore that the usefulness of high-resolution earth observation data and positioning systems lies above all in the areas of disaster management, humanitarian actions, refugee aid, maritime

surveillance, global warming, energy security and global food security, as well as in the detection of and response to global natural disasters, notably droughts, earthquakes, floods and forest fires; adds that a comprehensive concept of security also includes threats posed by near-Earth objects, space weather and space debris; calls therefore for the technical and infrastructure development of the systems to meet the requirements for a comprehensive concept of security;

Or. de

Amendment 13
Marian-Jean Marinescu

Draft opinion
Paragraph 1 b (new)

Draft opinion	*Amendment*
	1b. Asks the Commission to come up swiftly with a definition of EU needs regarding the potential contribution of the Space policy to the CSDP for all the main aspects: launching, positioning, imagery, communication, space weather, space debris, cyber security, jamming, spoofing and other intentional threats, security of the ground segment; considers that future space features of the current European systems should be set according to the CSDP requirements and covering all above related aspects;

Or. en

Amendment 14
Marian-Jean Marinescu, Evžen Tošenovský

Draft opinion
Paragraph 1 c (new)

Draft opinion	*Amendment*
	1c. Calls for the definition of the necessary requirements for future systems, private or public, which participate to safety of life applications (e.g. positioning, ATM air traffic management) with regards to the protection against possible security attacks (jamming, spoofing, cyber attacks, space weather and debris); considers that such safety requirements should be certifiable and under the surveillance of an European entity (such as EASA);

Or. en

Amendment 15
Marian-Jean Marinescu, Evžen Tošenovský

Draft opinion
Paragraph 1 d (new)

Draft opinion	*Amendment*
	1d. Recalls that Galileo is a civil system under civil control; recalls the existence of the Public Regulated Service (PRS), which is restricted to government-authorised users and is suitable for sensitive applications where robustness and complete reliability must be ensured; considers that the capacity of the PRS should be further developed in the next generations in order to respond to evolving threats; calls on the Commission to ensure that the operational procedures are as efficient as possible, particularly in the event of a crisis; stresses the need to continue developing and promoting applications based on Galileo capabilities, including the necessary ones for CSDP, in order to maximise the socio-economic benefits; recalls also the need to strengthen the security of the Galileo infrastructure, including the ground segment, and invites the Commission to

take the necessary steps in this direction in cooperation with the Member States;

Or. en

Amendment 16
Marian-Jean Marinescu

Draft opinion
Paragraph 1 e (new)

Draft opinion	*Amendment*
	1e. Notes in particular the operational need for very high resolution earth observation data under the Copernicus programme and invites the Commission to assess how this need could be met; also highlights developments such as near real-time observation and video-streaming from space, and recommends the Commission to investigate how to take advantage of these, including for security and defence purposes; recalls also the need to strengthen the security of the Copernicus infrastructure, including the ground segment, and the security of the data, and invites the Commission to take the necessary steps in this direction in cooperation with the Member States;

Or. en

Amendment 17
David Borrelli, Dario Tamburrano

Draft opinion
Paragraph 2

Draft opinion	*Amendment*
2. ***Welcomes*** the work to provide the EU with autonomy in governmental satellite communications (GOVSATCOM); calls on the Commission to make, on the basis of	2. ***Notes*** the work to provide the EU with autonomy in governmental satellite communications (GOVSATCOM); calls on the Commission to make, on the basis of

beneficiaries' needs and requirements, a cost-benefit evaluation of different solutions: a system relying on current capabilities with the possibility of integrating future capabilities or the creation of new capacities through a dedicated system; stresses that the final decision should take account of the interests of beneficiaries and industry; considers that the Space Surveillance and Tracking (SST) framework could provide a governance model;	beneficiaries' needs and requirements, a cost-benefit evaluation of different solutions: a system relying on current capabilities with the possibility of integrating future capabilities or the creation of new capacities through a dedicated system; stresses that the final decision should take account of the interests of beneficiaries and industry; considers that the Space Surveillance and Tracking (SST) framework could provide a governance model***, which by its own technical nature must be conceived in close collaboration with all world States already possessing or developing space capabilities***;

Or. en

Amendment 18
Jean-Luc Schaffhauser, Nicolas Bay, Gianluca Buonanno

Draft opinion
Paragraph 2

Draft opinion	*Amendment*
2. ***Welcomes*** the work to provide the EU with autonomy in governmental satellite communications (GOVSATCOM); calls on the Commission to ***make***, on the basis of beneficiaries' needs and requirements, a cost-benefit evaluation of different solutions: a system relying on current capabilities with the possibility of integrating future capabilities or the creation of new capacities through a dedicated system; stresses that the final decision ***should take account of the interests of beneficiaries*** and industry; considers that the Space Surveillance and Tracking (SST) framework could provide a governance model;	2. ***Condemns*** the work to provide the EU with autonomy in governmental satellite communications (GOVSATCOM)***, since these must be carried out via the Member States' governmental network***; calls on the Commission to ***propose***, on the basis of beneficiaries' needs and requirements, a cost-benefit evaluation of different solutions: a system relying on current capabilities with the possibility of integrating future capabilities or the creation of new capacities through a dedicated system; stresses that the final decision ***rests with the Member States and must be taken solely in their interest*** and ***in the interest of European*** industry; considers that the Space Surveillance and Tracking (SST) framework could provide a governance model;

Amendment 19
Marian-Jean Marinescu

Draft opinion
Paragraph 2

Draft opinion	*Amendment*
2. Welcomes the work to provide the EU with ***autonomy in*** governmental satellite communications (GOVSATCOM); calls on the Commission to make, on the basis of beneficiaries' needs and requirements, a cost-benefit evaluation of different solutions: a system relying on current capabilities with the possibility of integrating future capabilities ***or*** the creation of new capacities through a dedicated system; ***stresses that*** the final decision ***should take account of the interests of beneficiaries and*** industry; considers that ***the Space Surveillance and Tracking (SST) framework could provide a governance model***;	2. Welcomes the work to provide the EU with ***autonomous access to*** governmental satellite communications (GOVSATCOM) ***and invites the Commission to continue to make progress on this file; recalls that the first step in the process has been the identification of civil and military needs by the Commission and the European Defence Agency, respectively, and considers that the initiative should entail the pooling of demand and should be designed in a way that best meets the needs identified***; calls on the Commission to make, on the basis of beneficiaries' needs and requirements, a cost-benefit evaluation of different solutions: ***- the provision of services by commercial operators,*** **-** a system relying on current capabilities with the possibility of integrating future capabilities***; or*** **-** the creation of new capacities through a dedicated system; ***notes that, whatever*** the final decision***, any new initiative should benefit European industry (manufacturers, operators, launchers and other*** industry ***segments)***; considers that ***GOVSATCOM should also be considered as an opportunity to boost competitiveness and innovation by taking the benefit of the development of dual technologies, in the extremely competitive and dynamic context of the SATCOM market***;

Or. en

Amendment 20
Michel Reimon
on behalf of the Verts/ALE Group

Draft opinion
Paragraph 2

Draft opinion	*Amendment*
2. ***Welcomes*** the work to provide the EU with autonomy in governmental satellite communications (GOVSATCOM); calls on the Commission to make, on the basis of ***beneficiaries'*** needs and requirements, a cost-benefit evaluation of different solutions***: a system relying on current capabilities with the possibility of integrating future capabilities or the creation of new capacities through a dedicated system; stresses that the final decision should take account of the interests of beneficiaries and industry; considers that the Space Surveillance and Tracking (SST) framework could provide a governance model***;	2. ***Notes*** the work to provide the EU with autonomy in governmental satellite communications (GOVSATCOM); calls on the Commission to make, on the basis of ***real*** needs and requirements, a cost-benefit evaluation of different solutions***; stresses that the final decision should take account of the general public interest; considers that the Space Surveillance and Tracking (SST) framework could provide a governance model; calls for resilient, encrypted and secure communications to be at the basis of the analysis; underlines the need to diminish the reliance on non EU suppliers of equipment and services***;

Or. en

Amendment 21
Rolandas Paksas

Draft opinion
Paragraph 2

Draft opinion	*Amendment*
2. Welcomes the work to provide the EU with autonomy in governmental satellite communications (GOVSATCOM); calls on the Commission to make, on the basis of beneficiaries' needs and requirements, a cost-benefit evaluation of different solutions: a system relying on current	2. Welcomes the work to provide the EU with autonomy in governmental satellite communications (GOVSATCOM); calls on the Commission to make, on the basis of beneficiaries' needs and requirements, a cost-benefit evaluation of different solutions: a system relying on current

capabilities with the possibility of integrating future capabilities or the creation of new capacities through a dedicated system; stresses that the final decision should take account of the interests of beneficiaries and industry; considers that the Space Surveillance and Tracking (SST) framework could provide a governance model;	capabilities with the possibility of integrating future capabilities or the creation of new capacities through a dedicated system; stresses that the final decision should take account of the interests of beneficiaries and industry; considers that the Space Surveillance and Tracking (SST) framework ***would ensure the long-term accessibility of European and national space infrastructure, facilities and services, which are of particular importance for the security of Europe's economy, society and citizens***;

Or. lt

Amendment 22
Evžen Tošenovský

Draft opinion
Paragraph 2

Draft opinion	*Amendment*
2. Welcomes the work to provide the EU with autonomy in governmental satellite communications (GOVSATCOM); calls on the Commission to make, on the basis of beneficiaries' needs and requirements, a cost-benefit evaluation of different solutions: a system relying on current capabilities with the possibility of integrating future capabilities or the creation of new capacities through a dedicated system; stresses that the final decision should take account of the interests of beneficiaries and industry; considers that the Space Surveillance and Tracking (SST) framework could provide a governance model;	2. Welcomes the work to provide the EU with autonomy in governmental satellite communications (GOVSATCOM); calls on the Commission to make, on the basis of beneficiaries' needs and requirements, a cost-benefit evaluation of different solutions: a system relying on current capabilities with the possibility of integrating future capabilities or the creation of new capacities through a dedicated system; ***invites in this regard the Commission to address the issue of ownership and liability;*** stresses that the final decision should take account of the interests of beneficiaries and industry; considers that the Space Surveillance and Tracking (SST) framework could provide a governance model;

Or. en

Amendment 23
Marian-Jean Marinescu

Draft opinion
Paragraph 3

Draft opinion	*Amendment*
3. Points to the development of SST as a step towards security in space; considers that SST should become an EU programme with its own budget; invites the Commission to ***assess the need to*** take account of space weather and near-Earth objects ***and to come up with the next steps for SST in order to prepare industry***;	3. Points to the development of SST as a step towards security in space; considers that SST should become an EU programme with its own budget; ***believes also that the EU should develop a more holistic space situational awareness (SSA) capacity, with more predictive capabilities, involving the surveillance of space and the analysis and assessment of potential threats and hazards to space activities;*** invites ***therefore*** the Commission to ***build on SST, developing a broader SSA concept that would also address intentional threats to space systems and, in cooperation with ESA,*** take account of space weather and near-Earth objects***; believes that a holistic coordination of space activities should be reached without hampering the freedom of using space***;

Or. en

Amendment 24
Michel Reimon
on behalf of the Verts/ALE Group

Draft opinion
Paragraph 3

Draft opinion	*Amendment*
3. Points to the development of SST as a ***step towards security*** in space***; considers that SST should become an EU programme with its own budget***; invites the Commission to assess the need to ***take account of space weather and near-Earth objects and to come up with the next steps for SST in order to prepare industry***;	3. Points to the development of SST as a ***good initiative*** in space ***cooperation***; invites the Commission to assess the need to ***evolve it towards becoming an EU programme with its own budget and cover also the space weather and near-Earth objects***;

Or. en

Amendment 25
Constanze Krehl

Draft opinion
Paragraph 3

Draft opinion	*Amendment*
3. Points to the development of SST as a step towards security in space; considers that SST should become an EU programme with its own budget; invites the Commission to assess the need to take account of space weather and near-Earth objects and to come up with the next steps for SST in order to prepare industry;	3. Points to the development of SST as a step towards security in space ***and to the further development of its own SST capacities as a priority of the Union in the area of space capabilities for European security and defence***; considers ***therefore*** that SST should become an EU programme with its own budget; ***stresses in this regard the potential danger of space debris;*** invites the Commission to assess the need to take account of space weather***, space debris*** and near-Earth objects and to come up with the next steps for SST in order to prepare industry;

Or. de

Amendment 26
Angelika Niebler

Draft opinion
Paragraph 3

Draft opinion	*Amendment*
3. Points to the development of SST as a step towards security in space; considers that SST should become an EU programme with its own budget; invites the Commission to assess the need to take account of space weather and near-Earth objects and to come up with the next steps for SST in order to prepare industry;	3. Points to the development of SST as a step towards security in space; considers that SST should become an EU programme with its own budget; invites the Commission to assess the need to take account of space weather and near-Earth objects and to come up with the next steps for SST in order to prepare industry; ***calls, however, for this to be done without recourse to cuts in funding for current***

projects;

Or. de

Amendment 27
David Borrelli, Dario Tamburrano

Draft opinion
Paragraph 3

Draft opinion	*Amendment*
3. Points to the development of SST as a step towards security in space; ***considers that SST should become an EU programme with its own budget***; invites the Commission to assess the need to take account of space weather and near-Earth objects and to come up with the next steps for SST in order to prepare industry;	3. Points to the development of SST as a step towards security in space; ***calls on the Commission to explore possibilities for governance and financing of SST, in coherence with the above stated cooperation goals***; invites the Commission to assess the need to take account of space weather and near-Earth objects and to come up with the next steps for SST in order to prepare industry;

Or. en

Amendment 28
Jean-Luc Schaffhauser, Nicolas Bay, Gianluca Buonanno

Draft opinion
Paragraph 3

Draft opinion	*Amendment*
3. Points to the development of SST as a step towards security in space; considers that SST ***should become an EU*** programme ***with its own budget***; invites the ***Commission*** to assess the need to take account of space weather and near-Earth objects and to come up with the next steps for SST in order to prepare industry;	3. Points to the development of SST as a step towards security in space; considers that SST ***must remain a*** programme ***of the ESA and its member countries***; invites the ***Member States*** to assess the need to take account of space weather and near-Earth objects and to come up with the next steps for SST in order to prepare industry;

Or. fr

Amendment 29
Cora van Nieuwenhuizen, Carolina Punset, Morten Helveg Petersen, Philippe De Backer, Fredrick Federley, Pavel Telička

Draft opinion
Paragraph 3

Draft opinion	*Amendment*
3. Points to the development of SST as a step towards security in space; considers that SST should become an EU programme with its own budget; invites the Commission to assess the need to take account of space weather and near-Earth objects and to come up with the next steps for SST in order to prepare industry;	3. Points to the development of SST as a step towards security in space; considers that SST should become an EU programme with its own ***limited*** budget; invites the Commission to assess the need to take account of space weather and near-Earth objects and to come up with the next steps for SST in order to prepare industry; ***emphasises that the private sector should be enabled to play an important role in further developing and maintaining the non-sensitive part of the SST system, for which the two-sided governance structure of Galileo could serve as an example;***

Or. en

Amendment 30
Evžen Tošenovský

Draft opinion
Paragraph 3

Draft opinion	*Amendment*
3. Points to the development of SST as a step towards security in space; considers that SST ***should*** become an EU programme with its own budget; invites the Commission to assess the need to take account of space weather and near-Earth objects and to come up with the next steps for SST in order to prepare industry;	3. Points to the development of SST as a step towards security in space; considers that SST ***could*** become an EU programme with its own budget; invites the Commission to assess the need to take account of space weather and near-Earth objects and to come up with the next steps for SST in order to prepare industry;

Or. en

Amendment 31
Clare Moody, Theresa Griffin, Jude Kirton-Darling, Eugen Freund

Draft opinion
Paragraph 3

Draft opinion	*Amendment*
3. ***Points to the development of SST as a step towards security in space; considers that SST should become an EU programme with its own budget;*** invites the Commission to assess the need to take account of space weather and near-Earth objects and to come up with the next steps for SST in order to prepare industry;	3. Invites the Commission to assess the need to take account of space weather and near-Earth objects and to come up with the next steps for SST in order to prepare industry;

Or. en

Amendment 32
Constanze Krehl, Clare Moody

Draft opinion
Paragraph 3 a (new)

Draft opinion	*Amendment*
	3a. Points out that the prevention and the elimination of future and existing space debris must be part of a strategic reflection on how to ensure security in Europe; draws attention to the need for research into technological systems for the prevention and elimination of space debris; calls in this respect for close cooperation between the European Union and the Member States and the European Space Agency, as well as other stakeholders and countries in the field of space policy;

Or. de

Amendment 33
Michel Reimon

on behalf of the Verts/ALE Group

Draft opinion
Paragraph 3 a (new)

Draft opinion	*Amendment*
	3a. Concerned by the high costs incurred by Galileo and Copernicus, underlines the need to develop policies and research capabilities in order to provide future applications and develop a competitive European industry, capable of commercial success based on a healthy economic environment and not depending on Union or Member State budgets;

Or. en

Amendment 34
Franck Proust, Françoise Grossetête

Draft opinion
Paragraph 4

Draft opinion	*Amendment*
4. Notes the strategic importance of independent access to space and the need for dedicated EU action; calls on the Commission, in collaboration with the European Space Agency and the Member States, to coordinate ***planned*** institutional needs, so that industry can anticipate demand***,*** to support launch infrastructure and to promote R&D, particularly in breakthrough technologies;	4. Notes the strategic importance of independent access to space and the need for dedicated EU action; calls on the Commission, in collaboration with the European Space Agency and the Member States, to coordinate ***and develop*** institutional needs ***and European markets***, so that industry can anticipate demand ***–*** ***thereby boosting jobs and industry based in Europe –*** to support launch infrastructure and to promote R&D, particularly in breakthrough technologies;

Or. fr

Amendment 35
Jean-Luc Schaffhauser, Nicolas Bay, Gianluca Buonanno

Draft opinion
Paragraph 4

Draft opinion	*Amendment*
4. Notes the strategic importance of independent access to space ***and the need*** for ***dedicated EU action***; calls on the Commission***, in collaboration with*** the European Space Agency and the Member States***,*** to ***coordinate planned*** institutional ***needs, so that industry can anticipate demand***, ***to support launch infrastructure and*** to ***promote R&D, particularly in breakthrough technologies***;	4. Notes the strategic importance of independent access to space for ***committed Member States***; calls on the Commission ***to abandon its plans to turn*** the European Space Agency ***into a subsidiary body*** and ***appeals to*** the Member States to ***reject any moves to bring the ESA under the EU*** institutional ***umbrella and instead to preserve the ESA's strictly intergovernmental character***, ***which has been the key*** to ***its success since it was established***;

Or. fr

Amendment 36
Marian-Jean Marinescu

Draft opinion
Paragraph 4

Draft opinion	*Amendment*
4. ***Notes the strategic importance of independent access to space*** and the ***need for dedicated EU action; calls on the Commission***, in collaboration with the European Space Agency ***and the Member States***, to coordinate planned ***institutional needs***, so that industry can anticipate demand, to support launch infrastructure and to promote R&D, particularly in breakthrough technologies;	4. ***Calls on the Commission*** and the ***Member States***, in collaboration with the European Space Agency, to coordinate ***and share their*** planned ***space projects***, so that ***European*** industry can anticipate demand, to support launch infrastructure and to promote R&D, particularly in breakthrough ***launch*** technologies; ***considers that these efforts are necessary to allow Europe to compete in the global launch market;***

Or. en

Amendment 37
Dominique Riquet, Carolina Punset

Draft opinion

Paragraph 4

Draft opinion	*Amendment*
4. Notes the strategic importance of independent access to space and the need for dedicated EU action; calls on the Commission, in collaboration with the European Space Agency and the Member States, to coordinate planned institutional needs, so that industry can anticipate demand, to support launch infrastructure and to promote R&D, particularly in breakthrough technologies;	4. ***Recalls that space capabilities have become an essential part of Member States' defence and security policies and, therefore, of their sovereignty; notes that the European dimension of Galileo and Copernicus have made these programmes possible and ensured their success; however, wonders about the fact that these programmes are institutionally carried by the Commission while, according to the Treaties, the Union still lacks legal competence in the fields of security and defence;*** notes the strategic importance of independent access to space and the need for dedicated EU action; calls on the Commission, in collaboration with the European Space Agency and the Member States, to coordinate planned institutional needs, so that industry can anticipate demand, to support launch infrastructure and to promote R&D, particularly in breakthrough technologies;

Or. en

Amendment 38
Patrizia Toia, Flavio Zanonato

Draft opinion
Paragraph 4

Draft opinion	*Amendment*
4. Notes the strategic importance of independent access to space and the need for dedicated EU action; calls on the Commission, in collaboration with the European Space Agency and the Member States, to coordinate planned institutional needs, so that industry can anticipate demand, to support launch infrastructure and to promote R&D**,** particularly in breakthrough technologies;	4. Notes the strategic importance of independent access to space and the need for dedicated EU action; calls on the Commission, in collaboration with the European Space Agency and the Member States, to coordinate planned institutional needs, so that industry can anticipate demand, to support launch infrastructure and to promote R&D ***– not least through public-private partnerships –*** particularly

in breakthrough technologies;

Or. it

Amendment 39
Pavel Telička, Cora van Nieuwenhuizen

Draft opinion
Paragraph 4

Draft opinion	*Amendment*
4. Notes the strategic importance of independent access to space and the need for dedicated EU action; calls on the Commission, in collaboration with the European Space Agency and the Member States, to coordinate planned institutional needs, so that industry can anticipate demand, to support launch infrastructure and to promote R&D, particularly in breakthrough technologies;	4. Notes the strategic importance of independent access to space and the need for dedicated EU action; calls on the Commission, in collaboration with the European Space Agency and the Member States, to coordinate planned institutional needs, so that industry can anticipate demand, ***as well as on the other hand generate its own demand as concerns business driven utilization,*** to support launch infrastructure and to promote R&D, particularly in breakthrough technologies;

Or. en

Amendment 40
Clare Moody, Theresa Griffin, Jude Kirton-Darling, Eugen Freund

Draft opinion
Paragraph 4

Draft opinion	*Amendment*
4. Notes the strategic importance of independent access to space and the need for dedicated EU action; calls on the ***Commission, in collaboration with the European Space Agency and the*** Member States**,** to coordinate planned institutional needs, so that industry can anticipate demand, to support launch infrastructure and to promote R&D, particularly in breakthrough technologies;	4. Notes the strategic importance of independent access to space and the need for dedicated EU action; calls on the Member States to coordinate planned institutional needs, so that industry can anticipate demand, to support launch infrastructure and to promote R&D, particularly in breakthrough technologies;

Or. en

Amendment 41
Marian-Jean Marinescu, Evžen Tošenovský

Draft opinion
Paragraph 4

Draft opinion	*Amendment*
4. Notes the strategic importance of independent access to space and the need for dedicated EU action***; calls on the Commission, in collaboration with the European*** Space ***Agency*** and the ***Member States, to coordinate planned institutional needs, so that industry can anticipate demand, to support launch infrastructure and to promote R&D, particularly in breakthrough technologies***;	4. Notes the strategic importance of independent access to space and the need for dedicated EU action***, including with regard to security and defence, since this capacity allows Europe to gain access to space in the event of a crisis; considers that the EU must ensure that it has a strong*** space ***technological base*** and the ***necessary industrial capabilities to allow it to conceive, develop, launch, operate and exploit space systems, ranging from technological autonomy and cyber-security to supply-side considerations***;

Or. en

Amendment 42
Constanze Krehl, Clare Moody

Draft opinion
Paragraph 4 a (new)

Draft opinion	*Amendment*
	4a. Points out that the correct regulatory and policy frameworks must be established in order to give industry further impetus and incentives to pursue technological development and research into space capabilities; underlines in this regard that the Union, in cooperation with the European Space Agency and Member States, should take over the operational coordination of the future space capabilities of the Union.

Or. de

Amendment 43
Marian-Jean Marinescu, Christian Ehler

Draft opinion
Paragraph 4 a (new)

Draft opinion	*Amendment*
	4a. Calls for the necessary funding for space-related research to be ensured in the domains mentioned above; notes the important role that Horizon 2020 can play in helping the EU reduce its dependence in terms of critical space technologies; in that connection, recalls that the space part of Horizon 2020 falls within the 'Industrial leadership' priority, and in particular within the specific objective of 'Leadership in enabling and industrial technologies'; takes the view therefore that Horizon 2020 should be used to support Europe's space technological base and space industrial capabilities;

Or. en

Amendment 44
Evžen Tošenovský

Draft opinion
Paragraph 4 a (new)

Draft opinion	*Amendment*
	4a. Recognises simultaneously benefits of security-related international cooperation in area of space with EU's reliable partners, particularly with the United States and Japan;

Or. en

Amendment 45
Cora van Nieuwenhuizen, Carolina Punset, Morten Helveg Petersen, Dominique Riquet, Philippe De Backer, Fredrick Federley, Pavel Telička

Draft opinion
Paragraph 4 a (new)

Draft opinion	*Amendment*
	4a. Stresses the strategic importance of stimulating space innovation and research for security and defence; acknowledges the large potential of critical space technologies such as the European Data Relay System, which enables real-time and persistent earth observation, the deployment of mega-constellations of nanosats and, lastly, building up a responsive space capacity; underlines the need for innovative big data technologies to make use of the full potential of space data for security and defence; invites the Commission to incorporate these technologies in its Space Strategy for Europe;

Or. en

Amendment 46
Cora van Nieuwenhuizen, Carolina Punset, Dominique Riquet, Morten Helveg Petersen, Philippe De Backer, Fredrick Federley, Pavel Telička

Draft opinion
Paragraph 4 b (new)

Draft opinion	*Amendment*
	4b. Calls on the Commission to provide sufficiently for critical space technologies for security and defence during the mid-term review of Horizon 2020;

Or. en

Amendment 47

Cora van Nieuwenhuizen, Carolina Punset, Morten Helveg Petersen, Philippe De Backer, Fredrick Federley, Pavel Telička

Draft opinion
Paragraph 4 c (new)

Draft opinion	*Amendment*
	4c. Identifies the dangers of cyber warfare for European space programmes, taking into account that spoofing or jamming can disturb military missions or have far-reaching implications for daily life on earth; believes that cyber security requires a joint approach by EU, Member States, business and internet specialists; calls on the Commission, therefore, to include space communication in its cyber security programmes;

Or. en

Amendment 48
David Borrelli, Dario Tamburrano

Draft opinion
Paragraph 5

Draft opinion	*Amendment*
5. Stresses the need for better coordination of EU space capacities, ***with*** the necessary system architectures and procedures to ensure a proportionate level of security, including data security***; considers that EU space capacities dedicated to security and defence could be managed by a specific operational service coordination centre***.	5. Stresses the need for better coordination of EU space capacities, ***reinforced by international cooperation, developing*** the necessary system architectures and procedures to ensure a proportionate level of security, including data security.

Or. en

Amendment 49
Jean-Luc Schaffhauser, Nicolas Bay, Gianluca Buonanno

Draft opinion

Paragraph 5

Draft opinion	*Amendment*
5. Stresses the need for better coordination of ***EU*** space capacities, with the necessary system architectures and procedures to ensure a proportionate level of security, including data security; considers that ***EU*** space capacities dedicated to security and defence could be managed by a specific operational service coordination centre.	5. Stresses the need for better coordination of ***the*** space capacities ***of Member States***, with the necessary system architectures and procedures to ensure a proportionate level of security, including data security; considers that ***Member States'*** space capacities dedicated to security and defence could be managed by a specific operational service coordination centre ***within the ESA***.

Or. fr

Amendment 50
Evžen Tošenovský

Draft opinion
Paragraph 5

Draft opinion	*Amendment*
5. Stresses the need for better coordination of EU space capacities, with the necessary system architectures and procedures to ensure a proportionate level of security, including data security; ***considers that EU space capacities dedicated to security and defence could be managed by a specific operational service coordination centre.***	5. Stresses the need for better coordination of EU space capacities, with the necessary system architectures and procedures to ensure a proportionate level of security, including data security;

Or. en

Amendment 51
Marian-Jean Marinescu, Christian Ehler

Draft opinion
Paragraph 5

Draft opinion	*Amendment*
5. Stresses the need for better coordination of EU space capacities, with the necessary	5. Stresses the need for better coordination of EU space capacities, with the necessary

system architectures and procedures to ensure a proportionate level of security, including data security; considers that EU space capacities dedicated to security and defence ***could*** be managed by a specific operational service coordination ***centre.***	system architectures and procedures to ensure a proportionate level of security, including data security; ***invites the Commission to draw up and promote a model of governance for each system providing security and defence related services;*** considers that***, in order to provide an integrated service to end users,*** EU space capacities dedicated to security and defence***, should*** be managed by a specific operational service coordination ***centre (Command and Control Centre as it is referred to in the Horizon 2020 Work Programme 2014-2015);***

Or. en

Amendment 52
Michel Reimon
on behalf of the Verts/ALE Group

Draft opinion
Paragraph 5

Draft opinion	*Amendment*
5. Stresses the need for better coordination of EU space capacities, with the necessary system architectures and procedures ***to ensure a proportionate level of security, including data security***; considers that EU space ***capacities dedicated to security and defence could be managed by a specific operational service coordination centre***.	5. Stresses the need for better coordination of EU space capacities, with the necessary system architectures and procedures; considers that EU space ***structures are currently sufficient and should be carefully developed***.

Or. en

Amendment 53
Rolandas Paksas

Draft opinion
Paragraph 5

Draft opinion	*Amendment*

5. Stresses the need for better coordination of EU space capacities, with the necessary system architectures and procedures to ensure a proportionate level of security, including data security; considers that EU space capacities dedicated to security and defence could be managed by a specific operational service coordination centre.	5. Stresses the need for better coordination of EU space capacities, with the necessary system architectures and procedures to ensure a proportionate level of security, including data security***, as well as the use and exploration of space for peaceful purposes***; considers that EU space capacities dedicated to security and defence could be managed by a specific operational service coordination centre.

Or. lt

Amendment 54
Cora van Nieuwenhuizen, Carolina Punset, Morten Helveg Petersen, Philippe De Backer, Fredrick Federley, Pavel Telička

Draft opinion
Paragraph 5

Draft opinion	*Amendment*
5. Stresses the need for better coordination of EU space capacities, with the necessary system architectures and procedures to ensure a proportionate level of security, including data security; considers that EU space capacities dedicated to security and defence could be managed by a specific operational service coordination centre.	5. Stresses the need for better coordination of EU space capacities, with the necessary system architectures and procedures to ensure a proportionate level of security, including data security; considers that EU space capacities dedicated to security and defence could be managed by a specific operational service coordination centre***, which should be incorporated in a cost-efficient manner into one of the existing EU bodies, such as the European GNSS Agency, the EU Satellite Centre or the European Defence Agency, taking into account the capabilities already offered by those agencies;***

Or. en

Amendment 55
Clare Moody, Theresa Griffin, Jude Kirton-Darling, Eugen Freund

Draft opinion
Paragraph 5

Draft opinion	*Amendment*
5. Stresses the need for better coordination of EU space capacities, with the necessary system architectures and procedures to ensure a proportionate level of ***security, including*** data security; ***considers that EU space capacities dedicated to security and defence could be managed by a specific operational service coordination centre;***	5. Stresses the need for better coordination of EU space capacities, with the necessary system architectures and procedures to ensure a proportionate level of data security;

Or. en

Amendment 56
Michel Reimon
on behalf of the Verts/ALE Group

Draft opinion
Paragraph 5 a (new)

Draft opinion	*Amendment*
	5a. Calls on the Commission to assess whether European programs are reliable in crisis situations and appropriate governance structures are in place in order to manage them in such an event; expresses concerns over: data and communication security; difficulties in gaining access to data; and integration of space data in crisis relief operations;

Or. en

Amendment 57
Marian-Jean Marinescu

Draft opinion
Paragraph 5 a (new)

Draft opinion	*Amendment*
	5a. Considers that the coordination of space systems deployed in a fragmented way by the various Member States for

various national needs should be enhanced in order to be able to anticipate promptly the disruption of different applications (e.g. for ATM);

Or. en

Amendment 58
Massimiliano Salini, Antonio Tajani

Draft opinion
Paragraph 5 a (new)

Draft opinion	*Amendment*
	5a. Points out, as regards the future financing of European space programmes, that it would be desirable to determine when it might be possible to use forms of public-private partnership.

Or. it

Amendment 59
Flavio Zanonato, Patrizia Toia

Draft opinion
Paragraph 5 a (new)

Draft opinion	*Amendment*
	5a. Highlights the need to strengthen cyber security and the protection against hybrid threats;

Or. en

Amendment 60
Evžen Tošenovský

Draft opinion
Paragraph 5 a (new)

Draft opinion	*Amendment*
	5a. Underlines the high level of security for the EU GNSS systems; underlines the successful execution of tasks assigned to the European GNSS Agency, in particular through the Security Accreditation Board and the Galileo Security Monitoring Centres; calls in this respect for use to be made of the expertise and security infrastructure of the European GNSS Agency also for Copernicus; calls for this issue to be addressed in the mid-term review of Galileo and Copernicus;

Or. en

Amendment 61
Clare Moody, Theresa Griffin, Jude Kirton-Darling, Eugen Freund

Draft opinion
Paragraph 5 a (new)

Draft opinion	*Amendment*
	5a. Calls for a new inter-institutional mechanism for scrutiny and oversight of the EU space programmes in order to facilitate the effective implementation of the goals of an EU space policy under Article 189 of the Treaty of Lisbon, and to enable the co-legislators to work more efficiently with the Commission to monitor implementation of large scale scientific programmes;

Or. en

Amendment 62
Michel Reimon
on behalf of the Verts/ALE Group

Draft opinion
Paragraph 5 b (new)

Draft opinion	*Amendment*
	5b. Expresses concerns about the reliance of the European space programs on non-European data and data related services and the vulnerability of the PRS and key space infrastructure to interference from other countries with space capacities, whether or not they are EU allies.

Or. en