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NOTE

from:	General Secretariat of the Council
to:	Delegations
No. Cion prop.:	16006/11 TELECOM 152 CODEC 1801 +ADD1 +ADD2
Subject:	Proposal for a Regulation of the European Parliament and of the Council on guidelines for trans European telecommunications networks and repealing Decision No 1336/97EC

Delegations will find in the Annex a Presidency text on the Commission proposal on guidelines for trans European telecommunications networks and repealing Decision No 1336/97/EC (Articles and Annex).

The Presidency has based the text on written contributions from delegations and comments made by delegations at various WP TELE meetings.

The Presidency does not intend to attach text to the progress report for the TTE Council on 8 June 2012. Rather, the text presented and the related discussions would serve the purpose of further identifying positions and challenges as seen by delegations in order to prepare the Presidency Progress Report.

Bold/italic text is new text proposed by the Presidency or text proposed to be deleted (single strikethrough).

DG E 2B

Several delegations have expressed a wish for more specific indications in the INFSO guidelines' Annex on what method of intervention should apply in different situations. In this light, the Presidency invites delegations and the Commission to discuss:

- if section 2 of the INFSO guidelines Annex on broadband networks would benefit from a more prescriptive outline of which methods of intervention (financial instruments, grants or a combination thereof) would be available in which areas (sub-urban/medium density areas, rural and low density areas, high density/ urban areas, less developed regions, island, island state, landlocked and peripheral regions, public internet access points),
- and if so, which method of intervention delegations would find appropriate for the different areas.

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Article 1 Subject matter

This Regulation lays down guidelines to determine those trans-European telecommunication networks infrastructures that shall be supported in accordance with Regulation (EU) No xxxx/2012 [CEF regulation] XXX (CEF Regulation) in their development, implementation, deployment, interconnection, and interoperability.

These guidelines provide for the objectives and priorities of projects of common interest, identify projects of common interest, and set out criteria for the identification of new projects of common interest.

Article 2 Objectives

- 1. The projects of common interest shall contribute to achieving the general objectives as specified in article 3 of Regulation (EU) No xxxx/2012 [CEF regulation].
- 2. In addition to the general objectives, the projects of common interest shall contribute to the following specific sectoral objectives:
- (1) contribute to economic growth and support the development of the Single Market resulting in the improvement of the competitiveness of the European economy, including small and medium sized enterprises (SMEs).
- (2) contribute to improvements in daily life for citizens, businesses and governments through the promotion of the interconnection and interoperability of national telecommunication networks as well as access to such networks.

- (3) stimulate Europe-wide deployment of fast and ultra-fast broadband networks which, in turn, shall facilitate the development and deployment of trans- European digital services.
- (4) facilitate sustainable deployment of trans-European digital service infrastructures, their interoperability and coordination at European level, their operation, maintenance and upgrading.
- (5) contribute to greenhouse gas emission reductions, as well as protecting and improving the environment.
- 3. The achievement of the sectoral objectives set out in paragraph 2 shall be measured ex post by: (i) the level of broadband and ultrafast broadband coverage and the number of households subscribing to broadband connections at least above 100 Mbps.
- (ii) the percentage of citizens and businesses using public services online and the availability of such services across borders.

These elements serve for the ex post measurement of the achievements of the sectoral objectives and shall not constitute selection or eligibility criteria for actions of support from the CEF Regulation.

Article 3

Definitions

For the purposes of this Regulation, the following definitions shall apply:

- 1. "Telecommunication *networks infrastructure*" means broadband networks and digital service infrastructures.
- 2. "Broadband networks" means wired and wireless (including satellite) access networks, ancillary infrastructure and core networks capable of delivering very high speed connectivity.

- 3. "Digital service infrastructures" means networked services delivered electronically, typically over the internet, providing trans-European interoperable services *in the public of common* interest and having an enabling character for citizens, businesses and/or governments.
- 4. "European added value" means the value resulting from an EU intervention which is additional to the value that would have otherwise been achieved by Member State action alone or an action by a group of Member States.
- 5. "Core service platforms" means central element(s) or hub(s) of the digital service infrastructures essential to ensure trans-European connectivity, access and interoperability. This may also encompass physical equipment, such as servers, dedicated networks and software tools. Core service platforms are op to entities in all Member States.
- 6. "Generic services" means services that provide functionality and content of digital service infrastructures. They may be interconnected through a core service platform.

For the purposes of this Regulation, the definitions set out in Regulation XXX (CEF Regulation) shall also apply.

Article 4

Priorities for projects of common interest

Taking into account the objectives set out in Article 2, the priorities for projects of common interest shall be:

(a) the deployment of ultra fast broadband networks ensuring the speed of data transmission of *at least* 100 Mbps-*and above*;

- (b) the deployment of broadband networks to link island, landlocked and peripheral regions with the central regions of the Union *and the deployment of fast and ultrafast broadband networks in sparsely populated and remote rural areas* ensuring in those regions that speeds of data transmission are sufficient to permit broadband connectivity of *at least* 30 Mbps *and above and/or to improve reliability of connections between those regions and central regions of the Union*;
- (c) the support to core service platforms in the field of digital service infrastructures;
- (d) actions allowing to achieve synergies and interoperability between different projects of common interest in the field of Telecommunications, between projects of common interest concerning different types of infrastructures, including Transport and Energy, between project of common interest in the field of Telecommunications and projects supported by the Structural and Cohesion funds, as well as relevant research infrastructures.
- (e) actions in any area regarding infrastructures or telecommunications services that help to improve the competitiveness of the European enterprises, in particular small and medium sized enterprises (SMEs), and change them into leaders on these areas.
- (f) mapping of pan-European broadband infrastructure to facilitate further deployment.

Projects of common interest

- 1. Projects of common interest set out in the Annex shall contribute to the achievement of the objectives set out in Article 2.
- 2. A project of common interest may encompass its entire cycle, including feasibility studies, implementation, continuous operation, coordination and evaluation.

- 3. Member States and/or other entities in charge of the implementation of projects of common interest or contributing to their implementation shall take the necessary legal, administrative, technical and financial measures in compliance with the corresponding specifications of this Regulation.
- 4. The Union may facilitate the implementation of the projects of common interest through regulatory measures, where appropriate, through coordination, through support measures and through financial support to stimulate their deployment and take-up, as well as public and private investment
- 5. Actions contributing to projects of common interest shall be eligible for EU financial support under the conditions and instruments available under the Regulation establishing the Connecting Europe Facility [REF]. Financial support shall be provided in accordance with the relevant rules and procedures adopted by the Union, funding priorities and the availability of resources.
- 6. Subject to the second paragraph of Article 172 TFEU, the The Commission shall be empowered to adopt delegated acts modifying the description of projects of common interest included in the Annex, adding new projects of common interest to the Annex, or removing obsolete projects of common interest from the Annex, in accordance with paragraphs 7, 8 and 9 below and in accordance with Article 8.
- 7. While adopting the delegated act referred to in paragraph 6 above, the Commission shall assess whether modifying the description of project of common interest or adding a new project of common interest responds to the needs arising from:
 - (a) new technological and market developments; or
 - (b) emerging political priorities; or
 - (c) new opportunities for exploiting synergies between different infrastructures, including those in the field of Transport and Energy.

- 8. In addition to the criteria established in paragraph 7, if the delegated act concerns adding a new project of common interest the Commission shall also assess whether such project meets cumulatively the following criteria:
 - (a) contributes to the achievement of the objectives set out in Article 2;
 - (b) is based on mature technology ready for deployment;
 - (c) demonstrates European added value.
- 9. While adopting a delegated act removing an obsolete project of common interest from Annex, the Commission shall assess whether such project no longer responds to the needs set out in paragraph 7 or no longer meets the criteria set out in paragraph 8.

Cooperation with third countries and international organisations

- 1. The Union may establish contacts, discuss, exchange information and cooperate with public authorities or any other organisations in third countries to achieve any objective pursued by these guidelines where such cooperation gives rise to a European added value. Among other objectives, this cooperation shall seek to promote the interoperability between the trans-European telecommunication networks and telecommunication networks of third countries.
- 2. The Union may further establish contacts, discuss, exchange information and cooperate with international organisations and legal entities established in third countries to achieve any objective pursued by these guidelines.

Exchange of information, monitoring and review

- 1. On the basis of information received under Article 21 of the Regulation XXX establishing the Connecting Europe Facility, Member States and the Commission shall exchange information about the progress made with the implementation of these guidelines.
- 2. The Commission shall be assisted by an Expert Group, composed of a representative of each Member State, for monitoring of the implementation of these guidelines, assisting in the planning through the national strategies for high speed internet and mapping of infrastructures, and exchanging information.

In particular, the Expert Group shall assist the Commission in:

- preparatory work prior to drawing up the annual and multiannual work programme and its revision referred to respectively in Article 17(1) and Article 17(2) of the Regulation (EU) No xxxx/2012 [CEF regulation] establishing the Connecting Europe Facility,
- the measures to be taken to evaluate the implementation of the work programme on a financial and technical level
- preparatory work prior to drawing up delegated acts referred to in Article 5(6).

The Commission shall inform the Expert Group, at each of its meetings, of the progress made in implementing the work programme.

The Expert Group may also consider any other issue relating to the development of the trans-European telecommunication networks.

3. In conjunction with the mid-term evaluation and the ex-post evaluation of the Regulation (EU) No xxxx/2012 [CEF regulation] XXX establishing the Connecting Europe Facility and after consulting the Expert Group, the Commission shall publish a report on the progress in the implementation of these guidelines. That report will be submitted to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions.

4. In these reports the Commission shall also evaluate whether the scope of the projects of common interest continues to reflect political priorities, technological developments or the situation in the relevant markets. For major projects, these reports shall include an analysis of the environmental impact, taking into account climate change adaptation and mitigation needs, and disaster resilience. Such a review may also be carried out at any other time when it is deemed appropriate.

Article 8

Exercise of the delegation

- 1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.
- 2. The delegation of power referred to in the Articles 5(6) shall be conferred on the Commission *for* an indeterminate period of time from the date of the entry into force of this Regulation until the end of the multiannual financial framework period.
- 3. The delegation of power referred to in Article 5(6) may be revoked at any time by the European Parliament or by the Council. A decision of revocation shall put an end to the delegation of the power specified in that decision. It shall take effect on the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.
- 4. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
- 5. A delegated act adopted pursuant to Article 5(6) shall enter into force only if no objection has been expressed either by the European Parliament or the Council within a period of 2 months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by 2 months at the initiative of the European Parliament or the Council.

Repeal

Decision No 1336/97/EC, as amended by Decision No 1376/2002/EC, is repealed.

Article 10

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

It shall apply from 1 January 2014.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the European Parliament

For the Council

The President

The President

ANNEX

PROJECTS OF COMMON INTEREST

The projects of common interest shall aim for the removal of bottlenecks which hinder the completion of the Single Market i.e. providing connectivity to the network and access, including across borders, to digital service infrastructures.

The deployment and enhancement of trans-European telecommunication networks (broadband networks and digital service infrastructures) shall contribute to fostering economic growth, creating jobs and achieving a vibrant digital single market. In particular, their deployment will grant faster access to the internet, bring about information technology-enabled improvements in daily life for citizens, including children and young persons, businesses and governments, increase interoperability and facilitate the alignment or convergence to commonly agreed standards.

Section 1. Horizontal priorities

The deployment of trans-European telecommunication networks that will help to remove the bottlenecks existing in the digital single market shall be accompanied by studies and programme support actions. They are:

(a) **Innovative management, mapping & services**. Technical assistance measures, where necessary for deployment and governance, shall include project and investment planning and feasibility studies, in support of investment measures and financial instruments. Mapping of pan-European broadband infrastructure will develop an on-going detailed physical surveying and documentation of relevant sites, analysis of rights of way, assessments of potential for upgrading existing facilities, etc. It should follow the principles of the Directive 2007/2/EC (INSPIRE Directive) and related standardisation activities. Technical assistance measures may also support replication of successful investment and deployment models.

These actions may also include climate proofing to assess the climate related risks and ensure disaster resilience of infrastructure, in compliance with relevant requirements set out in EU or national legislation.

(b) **Support actions and other technical support measures.** These actions are needed to prepare or support the implementation of projects of common interest or accelerate their take-up. In the field of digital services, support actions shall also stimulate and promote the take-up of new digital service infrastructures that may become necessary or useful based on technological developments, changes in the relevant markets or emerging political priorities.

Section 2. Broadband networks

All broadband investments within the territory of the Union expand the network capacity and bring about benefits to all the potential users, including those in Member States other than the country of the investment. Investment in these networks will bring about more competition and more innovation in the economy, will deliver more efficient and effective public services, contribute to the EU goals on a low carbon economy and to the overall EU competitiveness and productivity. Investment in broadband infrastructure has been undertaken predominantly by private investors and it is expected that this will remain the case. However, the achievement of the Digital Agenda targets will require investment in areas for which there is not a clear business case or where a business case may need to be enhanced within the time frame of the targets. The following types of areas can be characterized on the basis of the likely investment:

Sub-urban/medium density areas are typically served with medium speed connections but tend to lack higher speeds. Where it is demonstrated that the business case for investments in advanced technologies is insufficient for private investors in the short run, financial support could generate profitable investment over the longer term by closing the viability gap and stimulate competition.

Rural and low density areas, and other areas where no land line is currently available, are typically served with low speed connections and in some cases even not served at all. The business case for investment is unlikely to be viable and the European targets are unlikely to be reached by 2020. Investment in these areas can receive needs higher financial support, provided by grants, possibly in combination with financial instruments. Such areas will include remote and sparsely populated regions where investment costs are either very high or where income is low. The support from the Connecting Europe Facility in these areas is likely to complement available cohesion funds or rural development and other direct public support.

High density/urban areas – with the exception of some low income regions – are typically well served with medium to fast speed connections, often provided by competitive offerings of cable and telecom operators. Yet because of this relatively satisfactory situation the market incentives to invest in very high speed networks such as fibre to the home are limited. Thus financial support may be also envisaged to investments in urban areas with dense populations which do not attract sufficient investment *or sustain competition* despite societal benefits it would generate, provided that it is in full compliance with Articles 101, 102 and 106 of the Treaty on the Functioning of the European Union, as well as, if relevant, with the Community Guidelines for the application of state aid rules in relation to rapid deployment of broadband networks.

In less developed regions, the support to the deployment of broadband networks should be provided primarily through the instruments of Structural and Cohesion funds. Grants and / or financial instruments from the Connecting Europe Facility may complement such support where necessary to achieve the objectives of this Regulation. The achievement of synergies between the CEF actions in those regions and the support from the Structural and Cohesion Funds may be reinforced by using an appropriate coordination mechanism.

The classification of regions to the above categories is indicatively provided by the map below.

[MAP NOT INCLUDED HERE]

Actions contributing to the project of common interest in the field of broadband networks shall constitute a balanced portfolio including actions contributing to both the 30 Mbps and the 100 Mbps Digital Agenda targets, covering suburban and rural areas in particular, as well as areas across the European Union.

Actions contributing to the project of common interest in the area of broadband networks, irrespective of the technology used, shall:

(a) Support investments in broadband networks capable of achieving the Digital Agenda 2020 target of universal coverage at 30 Mbps; or

- (b) Support investments in broadband networks capable of achieving the Digital Agenda 2020 target and of having at least 50% of households subscribing to speeds *at least above* 100 Mbps;
- (c) Comply with applicable law, in particular with competition law

and shall consist in particular of one or more of the following actions:

- (a) The deployment of passive physical infrastructure or the deployment of combined passive and active physical infrastructure and ancillary infrastructure elements, complete with services necessary to operate such infrastructure;
- (b) Associated facilities and associated services, such as building wiring, antennae, towers and other supporting constructions, ducts, conduits, masts, manholes, and cabinets;
- (c) Exploitation of potential synergies between the roll-out of broadband networks and other utilities networks (energy, transport, water, sewerage, etc), in particular those related to smart electricity distribution.

The deployment of broadband networks to connect island, landlocked and peripheral regions with central regions of the Union, including where necessary submarine cables, *including island states*, will be supported where it is essential to ensure access by isolated communities to broadband at *speeds of at least* 30 Mbps *and above*, *or to improve reliability of connections between these areas and central regions of the Union*. This support should complement other funds, whether EU or national, available for this purpose.

For the avoidance of doubt, services providing, or exercising editorial control over, content transmitted using electronic communications networks and services and information society services as defined in Article 1 of Directive 98/34/EC, which do not consist wholly or mainly in the conveyance of signals on electronic communications networks, are not covered by the scope of the actions contributing to the project of common interest in the field of broadband networks.

Beneficiaries of EU support for the project of common interest in the area of broadband include, but are not limited to:

- (a) Telecom operators (incumbent, whether investing directly or through a subsidiary or newentrant) launching investments in fast and ultra fast broadband networks.
- (b) Utility companies (e.g. water, sewage, energy, transport), which are expected to invest in passive broadband networks, either alone or in partnership with operators.
- (c) Regional decision makers, including municipalities, who may establish concessions for broadband infrastructures. Equipment providers may be interested in such an arrangement, via the creation of a special purpose company.
- (d) Partnerships between several operators active in wired and wireless markets to build new generation of infrastructures.

(e) Ad hoc organisations deploying broadband locally.

In building the portfolio due account shall be taken of Member States' investment needs in terms of the number of households to be connected with the support of the Connecting Europe Facility.

In addition, high speed connections to public internet access points, notably in public facilities, such as schools, hospitals, local government offices and libraries, shall also be supported.

Section 3. Digital Service Infrastructures

The implementation of digital service infrastructures shall contribute to the realisation of digital single market by removing existing bottlenecks in terms of service deployment. This will be achieved through the creation and/or enhancement of interoperable digital service infrastructure platforms, accompanied by essential basic digital service infrastructures. It shall rely on a two-layer approach:

- (1) Core service platforms are the central element(s) or hub(s) of the digital service infrastructures essential to ensure trans-European connectivity, access and interoperability. This may also encompass physical equipment, such as servers, dedicated networks and software tools. Core service platforms are open to entities in all Member States.
- (2) Generic services provide the functionality and content of digital service infrastructures. They may be interconnected through a core service platform.

The projects of common interest in the field of digital service infrastructures are the following:

Trans-European high-speed backbone connections for public administrations

A public trans-European backbone service infrastructure will provide very high speed and connectivity between public institutions of the EU in areas such as public administration, culture, education and health. This backbone infrastructure will support public services of European value through controlled quality of services and secure access. It will therefore guarantee a digital continuum of public service provisioning for the greater benefit of citizens, businesses and administrations. It will allow demand aggregation for connectivity, reaching critical mass and reducing costs.

Core service platform:

The infrastructure will be based on the existing Internet backbone and where necessary new networks will be deployed. Connections will be made directly or through regionally- or nationally-managed infrastructures. In particular it will provide connectivity for other trans-European services inter alia those mentioned in this Annex. This infrastructure will be fully integrated in the Internet as a key capacity for trans-European public service and will support the adoption of emerging standards (e.g. Internet protocols such as IPv618). Dedicated underlying infrastructure for connecting public administrations may be considered if necessary for security reasons.

The integration of the core platform into the European public services will be facilitated by the deployment of generic services: authorisation, authentication, interdomain security and bandwidth on demand, federation of services, mobility management, quality control and performance control, integration of nationalinfrastructures.

Interoperable 'cloud computing' service will provide the backbone infrastructure functionality on which clouds for trans-European public services can be offered. This includes network-type of trans-European services such as video-conference, virtualised storage and supporting computing-intensive applications, including those related to other projects of common interest.

Cross-border delivery of eGovernment services

eGovernment refers to the digital interaction between public authorities and citizens, public authorities and businesses and organisations, and among public authorities of different countries. Standardised, cross-border, and user-friendly interaction platforms will generate efficiency gains both throughout the economy and in the public sector and will contribute to the Single Market.

Core service platform:

Interoperable electronic identification and authentication across Europe. A set of connected and secured authentication servers and protocols that ensure interoperability of the variety of authentication and identification and authorization systems that exist in Europe will be deployed. This platform will enable citizens and businesses to access online services when needed for example to study, work, travel, get health care or do business abroad. It will constitute the core layer for all those digital services for which electronic identification and authentication are needed: e.g. electronic procurement, online health services, standardised business reporting, electronic exchange of judicial information, trans-European online company registration, e-Government services for businesses, including communication between business registers relating to cross-border mergers and foreign branches. This platform may also use resources and tools of the multilingual core platform

- (a) *Electronic procedures for setting up and running a business in another European country*: This service will allow dealing with all necessary administrative procedures electronically across borders through Points of Single Contact. This service is also a requirement the Directive 2006/123/EC on services in the internal market.
- (b) *Interoperable cross-border electronic procurement services*: This service will enable any company in the EU to respond to European public tenders from any Member State covering preaward and post-award electronic procurement activities, integrating activities such as Electronic Submission of offers, Virtual Company Dossier, eCatalogues, eOrders and eInvoices.
- (c) *Interoperable cross-border e-Justice services*: This service will enable the online cross-border access of citizens, businesses, organisations and legal practitioners to legal means/documents and judicial procedures. It will enable the online cross border interaction (via online data and document exchange) between legal authorities in different Member States and improve with this the ability to process cross border legal cases more efficiently;
- (d) *Interoperable cross border eHealth services*: These services will enable the interaction between citizens/patients and health care providers, institution-to-institution and organization-to-organization transmission of data, or peer-to-peer communication between citizens/patients and/or health professionals and institutions. The infrastructure to be deployed will comply with the principles

of data protection as set out, in particular, in Directives 95/46/EC and 2002/58/EC, as well as with international and national ethical rules related to the use of patient health records and other personal data.

The services will comprise cross border access to electronic health records and electronic prescription services as well as remote health/assisted living teleservices, cross border multilingual semantic services linked to the multilingual core platform, access to social security information building on the EESSI (Electronic Exchange of Social Security Information) infrastructure, etc.

- (e) European Platform for the interconnection of European business registers: This facility will provide a set of central tools and services enabling business registers in all Member States to exchange information on registered businesses, their branches, mergers and wind-ups. It will also provide a multicountry and multilingual search service for users using a Central Access Point accessible via the e-Justice portal.
- (f) Electronic procedures for moving from one European country to another: This service will allow dealing electronically with all necessary administrative procedures for making mobility for citizens easier and less costly. This service will create a noticeable and positive change in the ease with which citizens can study, work, reside and retire in any Member State, through Points of Single Contact for registration of change of address with all public authorities in the target country (local authority, school, doctor, police, etc.) with the source country electronic identity.

Enabling access to public sector information and multilingual services

Access to digital resources of European heritage

The objective of this infrastructure is to make available large collections of European cultural resources in digital form and foster their re-use by third parties, in full compliance with copyright and related rights.

Core service platform:

The development of the core service platform will build on the current Europeana portal. The platform – which requires the development, operations and administration of distributed computing, data storage facilities and software – will provide a single access point to European cultural heritage content at item level, a set of interface specifications to interact with the infrastructure (search for data, download data), support for the metadata adaptation and ingestion of new content, as well as information on conditions for reuse of the content accessible through the infrastructure. It will also provide the means for establishing an interaction with content providers, users (citizens accessing the portal) and re-users (creative industries), for the promotion of the platform, coordination of related networks and information exchange.

- (a) Aggregation of content held by cultural institutions and private content holders in the Member States
- (b) Crowd-sourcing facilities encouraging interactivity and enabling users to make an active contribution to the site
- (c) User-friendly services for the portal addressing issues such as search and browsing improvements as well as cross-language access
- (d) Exchange of rights information and licensing infrastructures;
- (e) Competence centres on digitisation and preservation of digital cultural heritage
- (f) Content repositories for cultural institutions and user-generated content and their long-term preservation

Access to re-usable public sector information

This digital service infrastructure will enable access for re-use to disclosable information held by the public sector in the EU. Its core platform will be developed in a cost-effective manner and its services will not suppose an a excessive burden for Member States, with the preferable use of automatic mechanisms for its building based on the existing services in the national open data catalogues.

Core service platform:

Distributed computing, data storage and software facilities will provide: single access point to multilingual (all EU official languages) datasets held by public bodies in the EU at European, national, regional and local level; query and visualisation tools of the data sets; assurance that the available datasets are licensed to be published and redistributed, including a data provenance audit trail; a set of application programming interfaces for software clients to interact with the infrastructure (search for data, gather statistics, download data) for the development of third-party applications. It shall also allow for collection and publication of statistics about the operation of the portal, the availability of data and applications and the way in which they are used.

Generic services:

Gradual extension of the access to all datasets held and made public by virtually all public administrations within the EU, including multilingual search, which will be achieved by the following:

- (a) aggregation of international/EU/national/regional/local datasets;
- (b) interoperability of datasets, including legal and licensing issues, to enable better re-use;
- (c) interface to open data infrastructures in third countries;
- (d) data repositories and long-term preservation services.

Multilingual access to online services

This service infrastructure will enable any current and future online service providers to offer their content and services in the widest range of EU languages in the most cost-effective way.

Core service platform:

The platform will enable acquiring, maintaining and making available large collections of live language data and reusable language processing tools. It will cover all EU languages and will comply with the relevant standards and agreed service and legal requirements. The platform will allow for flexible addition, curation and refinement of language data and tools by contributors, and ensure easy, fair and secure access and repurposing of such resources by organisations offering or developing language-enabled services. The platform will also support cooperation and interworking with similar initiatives and data centres, existing or forthcoming, within and outside the EU.

Generic services:

The platform will be populated with a broad range of reusable data and software resources, covering all EU languages. It shall assemble, harmonise and integrate such data and software elements within a distributed service infrastructure. It shall make available and in some areas develop or extend data and software resources to be used as building blocks to develop, customise and deliver multilingual services or multilingual gateways to online services.

Safety and security

Safer internet service infrastructure

The support will provide integrated and interoperable services at European level, based on shared awareness, resources, tools and practices and aimed at empowering children, their parents and carers, and teachers to make the best use of the Internet.

Core service platform:

The core service platform will allow for acquiring, operating and maintaining shared computing facilities, databases and software tools for the Safer Internet Centres (SICs) in the Member States, as well as back-office operations to handle the reporting on sex abuse content including the link with policy authorities including international organisations such as Interpol, and when appropriate, the handling of the take down of this content by the relevant web sites. This will be supported by common databases.

- (a) Help-lines for children, parents and carers on the best means for kids to use the Internet avoiding threats from harmful and illegal contents and behaviours, and the supporting back-office infrastructure.
- (b) Hotlines for reporting on illegal child sex-abuse content on the Internet
- (c) Tools to ensure access to age-appropriate content and services,
- (d) Software that allows easy and fast reporting of illegal content and its takedown, as well as reporting of grooming and bullying.
- (e) software systems that allow better identification of (not reported) child sexual abuse content on the internet as well as technologies to support police investigations, especially with a view to identifying child victims, perpetrators and commercial trading of such content.

Critical Information Infrastructures

Communication channels and platforms will be developed and deployed in order to enhance the EU-wide capability for preparedness, information sharing, coordination and response.

Core service platform:

The core service platform will consist of a network of National/Governmental Computer Emergency Response Teams (CERTs) based on a minimum set of baseline capabilities. The network will provide the backbone of a European Information Sharing and Alert System (EISAS) for EU citizens and SMEs.

- (a) Proactive services technology watch and dissemination and sharing of security-related information; security assessments; providing guidelines on security configuration; providing intrusion detection services;
- (b) Reactive services incident handling and response; issuing alerts and warnings; vulnerability analysis and handling, artefact handling (proving high-quality alerts on new malware and other artefacts).

Deployment of information and communication technology solutions for intelligent energy networks and for the provision of Smart Energy Services

Smart energy services use modern information and communication technologies to meet the needs of citizens (who can be producers as well as consumers of energy), energy providers and public authorities. Smart energy services cover the interaction between citizens and energy providers, organization-to-organization data transmission, and peer-to-peer communication between citizens. They open up opportunities for existing and new actors in both the telecoms and the energy markets (e.g. Energy Service Companies ESCOs). They can also enable companies and citizens to trace the greenhouse gas emissions of their purchase decisions.

Core Service Platforms

Communications infrastructure, typically deployed by utilities in partnership with telecom operators, as well as the necessary IT hardware to be embedded in energy components (e.g. substations). They also include the core services that enable monitoring of assets, control for power management, automation and data management and communication between the different actors (service providers, network operators and other utilities, consumers, etc).

Generic Services will be typically delivered by a wide range of new and innovative actors, such as energy service providers, ESCOs, energy aggregators facilitating especially the entry of different types of local SMEs and preventing monopolisation of the retail market.

They will make available the functionality for customers to manage their energy demand, their renewable energy sources and their storage capacity, with the aim of optimising their energy use, reducing energy bills and greenhouse emissions, while ensuring data privacy and security.

- (a) Smart metering infrastructure to measure and communicate information on energy consumption. Generic Services also include customer premises energy management equipment, i.e. IT hardware devices associated to home area networks that are connected to the smart meter
- (b) Software agents able to decide when to buy/sell energy, when to switch on/off appliances in function of price signals from the energy provider, weather forecast information, data management and communication, control and automation devices and their networked solutions.