

## 6.5 THEMIS - APPLICATION OF EU LAW: PROVISION OF CROSS SECTOR COMMUNICATION AND PROBLEM SOLVING TOOLS (2016.01)

### 6.5.1 IDENTIFICATION OF THE ACTION

Type of Activity	Common Services
Service in charge	SG.C.3
Associated Services	SG.R.3, EU Publications Office , DG CONNECT, Parliament, Council

### 6.5.2 EXECUTIVE SUMMARY

The Commission's Decide project, currently under development, has a substantial impact on the scope of THEMIS, directly affecting the original ISA proposal for action 1.20 – funded under the ISA work programme during the period 2013-2015 - specifically with regards to the infringements management process. The objective of Decide is to streamline and harmonise the Commission's decision-making procedures and to consolidate the existing applications into one integrated system ("Decide"), supporting the whole workflow from programming to adoption (planning, consultation and decision)planning to dissemination, across all types of documents.

THEMIS needs to be integrated as much as possible with Decide in order to make use of Decide's inter-service consultation functionality and its adoption module, including all decision-making related functionalities.

The alignment of THEMIS and Decide is still an on-going task, to be completed during Q4 2015/Q1 2016. Therefore it has not been possible to progress with the work on the infringements management related web services, in scope of the original ISA action 1.20 proposal, during 2015 as initially planned.

In this respect, this new proposal for the ISA<sup>2</sup> Work Programme is a continuation of the original ISA action 1.20, taking over the non-accomplished work on infringements management related web services.

#### **Context**

Under article 17 TUE, the Commission shall oversee the application of EU law under the control of the Court of Justice of the EU. This monitoring task is entrusted to the Commission in its exclusive role as "guardian of the Treaty".

The monitoring of the application of EU law is a complex task, involving a number of steps and specific rules which are inter alia provided for by article 258 TFUE (Treaty on the Functioning of the European Union). The cooperation between the Commission and the Member States through the whole process remains a crucial element in the effective monitoring of the application of EU law. The structural dialogue before opening formal proceedings contributes to the resolution of a high percentage of possible breaches of EU law (EU Pilot).

#### **Problem statement**

The facilities to assist Commission staff in this task are currently provided by a series of EU-LAW applications (CHAP, EU-PILOT, MNE, NIF) covering – partially - different phases of the overall

process for the adoption of an infringement decision (complaint handling, pre-infringement phase, transposition of directives, and infringements proceedings).

All these applications, even though they provide the basic needs for the management of the day-to-day activities for the above-mentioned process, have gradually become inadequate to comprehensively provide the functionalities corresponding to the evolving business requirements.

Therefore, to comply with current needs, major evolutive evolutionary development is necessary. However, given the underlying technologies and the state of the existing applications, which have already undergone a series of enhancements since 2004 (production date of the current NIF application, the first application from the EU law family to be released), taking this approach would be extremely costly due to their instability, limitations, lack of flexibility to incorporate advanced and/or new functionalities, lack of common methods of operation, different interaction patterns and limited inter-operability.

### **Proposed solution**

The proposed approach towards a new solution, aligned with the requirements of the on-going IT governance and rationalisation efforts within the "Legislative Lifecycle" domain being currently fostered across the SG and the Commission as a whole, will have a significant impact to overcome the above-mentioned deficiencies.

THEMIS – as the envisaged solution – will enhance the execution of the fundamental task of the Commission in monitoring EU law implementation and its application by Member States by providing an end-to-end management of the full inherent life-cycle of EU-LAW processes, exposing one single, usable and coherent point of access - both for the Commission and the Member States - improving the efficiency and transparency of reporting and monitoring of Member States' implementation and application of EU law.

In essence, THEMIS aims at improving inter-operability of the tools to manage complaint, pre-infringement and infringement handling. Integration with Decide will ensure mainstreaming the phases of inter-service consultation and Commission decision-taking processes. This integration aims at simplifying working methods and avoiding data inconsistencies and duplication. THEMIS includes a set of cross-sector interest web services to be consumed by in-house applications of the Member States.

### **6.5.3 OBJECTIVES**

Better and more efficiently managed application of EU law involves both the European Commission and the Member States, working in close partnership. Member States are responsible for the timely and correct implementation and application of EU law while the Commission's responsibility is to ensure that EU law is applied consistently. To this end the Commission works in partnership with Member States via EU Pilot and launches, if necessary, formal infringement procedures.

The specific objective of this action is to identify and implement common web services of interest that can support this. The project will analyse, design and develop or implement services to manage and support the exchange of information between Member States and the Commission during all phases of infringement proceedings.

All these web services are to be integrated into THEMIS, the central Commission IT application which will provide a one-stop solution for Commission services and Member States' administrations with

---

regard to all aspects of the application of EU law; starting from the transposition process of directives into national legislation and the notification of the corresponding legal acts to the Commission, through dialogue based problem resolution triggered either by complaints or own-initiative of the Commission, onto the full bi-directional flow of information in the context of infringement proceedings.

In detail, this action aims at:

- Providing a single point of access for Member States as regards to application of EU law.
- Reducing administrative burden of the Member States and of the Commission.
- Enhancing efficiency and transparency of reporting and monitoring of EU law application.
- Improving statistical tools to simplify the gathering of information, its dissemination and reporting.

#### 6.5.4 SCOPE

The scope of this action can be summarised as follows:

- Better integration between Commission and national IT tools:

Thanks to improved interoperability, national IT tools should be able to connect and interact easily and automatically with Commission systems.

This is becoming increasingly important as the national administrations are developing more and more in-house IT applications and online services managing EU legislative work, in particular for infringement proceedings.

- Management of infringement proceedings through a modern workflow system:

The need to speed up procedures and rationalise the decision-taking process makes it necessary to use advanced technologies for workflow management. Commission services and Member States should be able to work in a system, which allows a complete follow up of infringement procedures, from the creation to the final closing of the case, including any attendant communication and publication of information.

- Statistical facilities and search tools

There is need for more elaborated reporting and statistical tools to facilitate overall reporting on the application of Union law, including for the purpose of preparing the Annual Report on monitoring the application of EU Law and the publication of other information.

Deliverables covered under this proposal will include both web-services and their corresponding backend services, providing for bi-directional data and document exchange facilities for the infringements proceedings domain<sup>59</sup>.

The Commission offers the deliverables as a service to Member States, developing the required application and interfaces and hosting the computing infrastructure.

This will be accompanied by technical documentation detailing the interfaces to be used. Furthermore, on request, the Commission will provide assistance to Member States, in order to ensure correct and reliable interconnection between Member States' system and THEMIS.

### 6.5.5 PROBLEM/OPPORTUNITY STATEMENT

The monitoring of the application of EU Law is a complex task, involving a number of steps and very specific rules. Currently, this task is only partially supported by a family of old information systems that are technologically obsolete and lack interoperability amongst them.

Even though these applications fulfil the basic needs for the management of the day-to-day activities for the above-mentioned process, they have gradually become inadequate to comprehensively cover the evolving business requirements.

To comply with current needs, the largely outdated systems in operation today need to be replaced by a modern, well performing system, which is built on a sound technological platform and offers the required interoperability.

### 6.5.6 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States and European Commission	<p><b>Security, rapidity and privacy, preservation of information:</b></p> <p>The service dedicated to the communication of infringement notifications will guarantee the information exchange system providing:</p> <ul style="list-style-type: none"> <li>- immediate transmission (MS are required to respect deadlines),</li> <li>- secure transmission with acknowledgement of receipt (high level of trust); and</li> <li>- secure data preservation (legal security for both MS and the EC).</li> </ul>
Member States and European	<p><b>Data quality</b></p> <p>THEMIS external services will improve data quality, integrity and</p>

<sup>59</sup> The underlying principle is that public authorities responsible for implementing and ensuring compliance with EU legislation should not be presented with a proliferation of different information systems but rather a single interface in the form of the future THEMIS system and its externally accessible interfaces, thus ensuring that information existing in Member States own system(s) need not be re-encoded.

Commission	preservation of information by implementing a state-of-the-art user interface and interoperability to back-office and by using reliable and trusted data transfer. Search and statistics retrieval will be also improved.
Member States and European Commission	<b>Better cooperation</b> THEMIS external services will improve the transparency and openness of data exchange between Commission and MS by developing/adapting and using a component to share case/project related data.
Member States	<b>Administrative simplification, effectiveness and efficiency, data quality</b> THEMIS external services will increase efficiency and data quality by implementing state-of-the-art user interface and interoperability (system-to-system) for the transmission of replies and prolongation of deadline requests in the matter of infringement proceedings.
European Commission	<b>Efficient management of infringements</b> THEMIS external services will provide data quality, efficient and secure data dissemination among services and will be the basis of the decision making process in matter of infringements.
European Commission	<b>Efficient IT development and evolution, flexibility, scalability, adaptability to legislation change</b> THEMIS external services will be flexible, scalable and adaptable by being developed as a service and component oriented IT architecture.

### 6.5.7 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation, inputs / outputs
Communication "Towards interoperability for European public services" COM(2010) 744 final	This Communication introduces European Interoperability Strategy (EIS) and the European Interoperability Framework (EIF) for European public services, being part of the Digital Agenda, focusing on interoperability.
eGovernment Action – Plan 2011 -2015	Reducing administrative burden by horizontal integration of processes across administrative authorities.
ISA <sup>2</sup> Action 'Participatory knowledge for supporting	Reusable solutions that allow the electronic participation of stakeholders, the analysis of the captured opinions and the discovery and generation of knowledge will be taken into account for enhancing the monitoring of EU law implementation and its application by Member States.

decision making'	
ISA <sup>2</sup> Action 'Legislation interoperability tools (LEGIT)'	Existing or under development building blocks (i.e. software, tools etc.) that support and improve the electronic exchange of documents and metadata in the context of the legislative process and the transformation between different formats will be taken into account for enhancing the monitoring of EU law implementation and its application by Member States.
'ISA <sup>2</sup> Action ICT implications of EU legislation'	Results and conclusions related with the properly preparation and evaluation of EU legislation regarding the ICT implications will be taken into account for enhancing the monitoring of EU law implementation and its application by Member States.
ISA <sup>2</sup> Action 'European Legislation Identifier (ELI)'	The proposed approach for identifying legislation documents and the supporting assets and solutions will be taken into account for enhancing the monitoring of EU law implementation and its application by Member States.
ISA <sup>2</sup> Action 'Interinstitutional framework for digital OLP management'	The proposed interoperable ways of structuring the content of the documents that need to be exchanged between the institutions for the purposes of the ordinary legislative procedure will be taken into account for enhancing the monitoring of EU law implementation and its application by Member States.

### 6.5.8 REUSE OF SOLUTIONS DEVELOPED BY ISA, ISA<sup>2</sup> OR OTHER EU / NATIONAL INITIATIVES

THEMIS will assess the feasibility of re-using solutions and/or results outcome of other ISA, ISA<sup>2</sup> or EU / National initiatives, specifically ISA Action 1.8, ISA Action 1.11, ISA Action 1.14, ISA Action 1.18 and ISA Action 1.21.

Action / Policy	Description of relation, inputs / outputs
ISA Action 1.8 – Trusted Information Exchange Platform	THEMIS will develop the future Infringement (INFR) service as a single exchange platform and repository of all official infringement documents exchanged between Member States and the Commission (by using the eTrustEx platform for the transmission of official documents to the Member States and reception of acknowledgement from them), mainly in legislation and competition policy areas.
ISA Action 1.11 – Interoperable and generic notification services.	THEMIS will assess the feasibility of re-using the results of ISA Action 1.11 in relation to the notification services developed within the scope of this action.
ISA Action 1.18 – Federated Managed Authentication Services for	THEMIS will assess the feasibility of re-using the results of ISA Action 1.18 in relation to its outcome web services interfaces developed.

ECAS	
ISA Action 1.21 – European Legislation Identifier	ISA Action 1.21 will provide input to this action.

### 6.5.9 EXPECTED RE-USABLE OUTPUTS (solutions and instruments)

Output name	Web services tailored to infringement management processes
Description	The web services in scope to develop as part of this proposal are tailored to infringement management processes. Nevertheless, there may be possibilities to reuse/apply certain outputs to other purposes
Reference	
Target release date / Status	2017

## 6.5.10 ORGANISATIONAL APPROACH

### 6.5.10.1 Expected stakeholders and their representatives

Stakeholders	Representatives
European Commission – administrator	Unit SG C.3 of the Secretariat General administrating the application, providing policy guidance on its use.
Project Owner	Unit SG.C.3 of the Secretariat General responsible to coordinate the Commission's actions as guardian of the Treaties.
Solution Provider	Unit SG R.3 (Information Technology) responsible for the development of THEMIS.
End users – Commission Services	Infringement correspondents and infringements case handlers in all Commission services.
End users - Member States authorities	Current MNE/INFR end users (various national administrations in all Member States) and Central Managers in the Member States represented in the EU Law Network.

### 6.5.10.2 Communication plan

The main communication actions are described next:

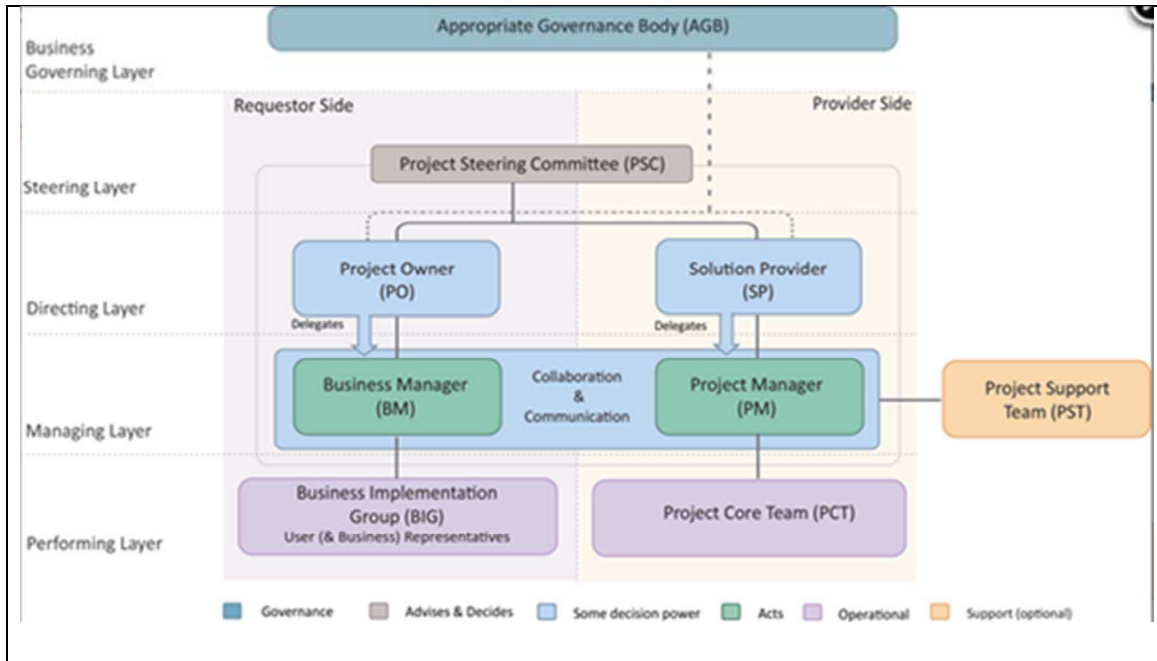
- Written communication, both to internal and external stakeholders (newsletter via e-mail).
- Awareness sessions – 1 with MSs representatives and 1 with DGs representatives – to present the project.
- Dissemination material for all relevant stakeholders:
  - o DGs: Leaflets, posters and a quick-start guide.
  - o MSs: Quick start guide.
- Meetings:
  - o With external stakeholders, once a year, in the frame of the EU Law Network meetings, to provide status and recollect feedback.
  - o With internal stakeholders, twice a year, as part of the DGs infringement correspondents meeting, to provide status and recollect feedback.
- First-line support: The Project Support Team will help users through the change and collecting feedback.
- CIRCABC group of interest on "Implementation and application of EU law", members of which are MS representatives.

Event	Representatives	Frequency of meetings / absolute dates of meetings
EU Law Network	All Member States	Normally, once or twice a year
Infringement correspondents meetings	Representatives from all DGs	Once or twice a year
Directors network	Representatives from all DGs	Once or twice a year
Project owner/System supplier	SG.C.3/SG.R.3	Quarterly reporting using PM <sup>2</sup> methodology

### 6.5.10.3 Governance approach

This project will follow the standard PM2 project governance structure.





Project Owner: Mr. VON KEMPIS, Karl (SG.C3)

Solution Provider: Mr. GRITSCH, Martin (SG.R3)

Project Manager: Mr. BLAZQUEZ DE MIGUEL, Víctor (SG.C3)

Business Manager: Mrs. GROCHOWIAK, Elzbieta

Project Support Team (PST): To be appointed.

Project Core Team (PCT): To be appointed.

Business Implementation Group (BIG): 1 representative per DG and 1 representative per MS. To be appointed at a later stage.

The governance approach has established weekly coordination meetings between SG.C.3 (project owner) and SG.R.3 (solution provider). In addition, this action will respect the general ISA Governance under the supervision of the ISA Coordination Group inside the cluster "Trusted Information Exchange".

The governance of this action project is set up in the vision document for NIF2 (renamed later as "THEMIS"). According to this document, the Steering Committee monitors completion of the project phases; sets project requirements, objectives and outcomes, validates project deliverables, tests activities and disseminates information about the project to the Commission services. It is composed of members from Units C.3, R.2 and R.3 of the Secretariat General and representatives of those services which manage complaints and infringement procedures (DG AGRI, DG CLIMA, DG CNECT, DG EMPL, DG ENER, DG GROW, DG ENV, DG FISMA, GROW, HOME, DG JUST, Legal Service, DG MOVE, DG SANCO and TAXUD).

---

In parallel, Member States are participating in THEMIS work through the EU Law Network. Tests and feedback can be submitted to the functional mailbox [SG-THEMIS-FEEDBACK@ec.europa.eu](mailto:SG-THEMIS-FEEDBACK@ec.europa.eu).

### 6.5.11 TECHNICAL APPROACH

The services in scope of this proposal will represent the common future external module of the THEMIS system, providing a reliable, robust and secure mechanism to connect to systems in Member States' public authorities (existing or under development).

System-to-system data exchanges between the national administrations and the Commission will reduce extra manual data encoding. This will allow Member States to transmit data directly from their back-office systems in respect of the following principles of the European Interoperability Framework: security and privacy, multilingualism, administrative simplification, transparency, preservation of information, openness, reusability, effectiveness and efficiency. History of all data exchanges with the Member States' administrations should be accessible to either party.

All services will be strongly integrated to ensure a consistent and reliable workflow.

The technical implementation of the proposed data-exchange services has the following requirements:

- State of the art secure web services allowing for the exchange of meta-data for confidential (official notification of infringements and MS replies to those notifications) dossiers; these services should permit uploading such information from MS systems into the Commission system.
- Non-repudiation for official notifications of infringements.
- Legally binding electronic signature for official notification of infringements and transmission of the corresponding MS replies (explicit requests by Spain and Germany). To be checked if this can be covered by the eTrustEx platform.
- A transfer mechanism allowing for highly reliable exchange of documents, including very large documents if needed (electronic transmission should be the unique notification mechanism). To be checked if this can be covered by the eTrustEx platform.
- A publishing service allowing MS to 'pull' information accessible to them in a format compliant with open government publication standards, allowing them to integrate the extracted information into their own IT systems.
- A notification service which will inform the concerned parties that new tasks/data are available in the system, allowing either for specific action in the external interface, or automated download procedures for available data.
- A reporting and statistics service which will allow Member States to retrieve, at any time, different sets of statistics and historical data of EU-LAW proceedings they are / have been involved in.

Backwards compatibility with the current basic web services used by MS needs to be ensured for an initial length of time (6-12 months), since often MS have out-sourced IT developments and any changes on our side will have a non-negligible impact for them.

By the same token, it is imperative to involve MS in order to ascertain that current and future MS requirements are met. The Commission will inform Member States at an early stage of the projected developments and collect feed-back from them. This will be channelled through the existing EU Law Network, with regular coordination meetings in Brussels.

## 6.5.12 COSTS AND MILESTONES

### 6.5.12.1 List of use cases identified: 10 use cases

- *ISA1 Submit reply to infringement notification:* This technical use case describes the required actions, associated data and the web-service call structure to correctly upload meta-data and associated documents for the reply by a MS to an official infringement notification.
- *ISA<sup>2</sup> Request an extension of deadline for a reply to an infringement:* This technical use case describes the required actions, associated data and the web-service call structure to correctly upload a meta-data and associated documents with regards to a request for an extension of deadline to reply to an infringement case.
- *ISA3 Retrieve reply:* This technical use case describes the required actions and the web-service call structure to retrieve all meta-data and documents associated with a reply to an infringement notification in a machine-readable format (XML).
- *ISA4 Retrieve infringement notification:* This technical use case describes the required actions and the web-service call structure to retrieve all meta-data and documents associated with a given dossier and accessible to a MS in a machine-readable format (XML).
- *ISA5 Retrieve infringement dossier:* This technical use case describes the required actions and the web-service call structure to retrieve all meta-data and associated documents accessible to a MS for an entire infringement dossier in a machine-readable format (XML).
- *ISA 6 Communication of additional information:* This technical use case describes the mechanism and web-service structure to provide additional information to on-going infringement cases at any time during their life-cycle.
- *ISA 7 User management:* This technical use case describes the mechanism and web-service structure to manage Member States users. Add, delete or update users, define roles and rights, or re-assign / delegate cases are actions to be supported by this web-service. As part

of this use case, feasibility of re-using the results of ISA Action 1.18 (Federated Authentication Action) will be checked.

- *ISA 8 Notifications and Alerts:* This use case describes the mechanism and web-service structure to retrieve new tasks/data available in the system, allowing either for specific action in the external interface, or automated download procedures for available data. As part of this use case, feasibility of re-using the results of ISA Action 1.11 (Interoperable and generic notification services) will be checked.
- *ISA 9 Statistics and reporting – Infringement cases:* This technical use case describes the mechanism and web service structure to retrieve different reporting and statistics related to infringement cases, from the Member State perspective.
- *ISA 10 Statistics and reporting – EU-LAW proceedings life-cycle:* This technical use case describes the mechanism and web service structure to retrieve different reporting and statistics throughout the whole life cycle of EU-LAW proceedings, from the Member State perspective.

The following table summarises the scope of the identified use cases.

Use case	Name	Release	Scope
ISA 1	Submit reply to infringement notification	V1	Infringements management
ISA 2	Request an extension of deadline for a reply to an infringement	V1	Infringements management
ISA 3	Retrieve reply	V1	Infringements management
ISA 4	Retrieve infringement notification	V1	Infringements management
ISA 5	Retrieve infringement dossier	V1	Infringements management
ISA 6	Communication of additional information	V1	Common services
ISA 7	User management	V1	Common services
ISA 8	Notifications and Alerts	V1	Common services
ISA 9	Statistics and reporting – Infringement Cases	V1	Statistics and Reporting
ISA 10	Statistics and reporting – EU-LAW proceedings life-cycle	V1	Statistics and Reporting

### 6.5.12.2 Breakdown of anticipated costs and related milestones

Phase: Inception Execution Operational	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Planning	Requirements gathering, assuring alignment with Decide's scope.	30	ISA <sup>2</sup>	Q1/2016	Q2/2016
Planning	Detailed formal (technical use cases) of the in scope identified business services and their exposure through web services. Validation of the proposal by all actors.	60	ISA <sup>2</sup>	Q1/2016	Q2/2016
Executing	Development of 'in/out' web services and their correspondent backend business services.	220	ISA <sup>2</sup>	Q2/2016	Q4/2016
Executing	Testing and training; updated technical documentation for Member States to allow them to integrate their systems with the new services.	30	ISA <sup>2</sup>	Q1/2017	Q1/2017
Closing	Roll-out V1	30	ISA <sup>2</sup>	Q1/2017	Q1/2017
Monitor & Control	Monitor and report on on-going project activities and project performance, planning and implementing corrective actions in case of need.	30	ISA <sup>2</sup>	Q1/2016	Q1/2017
	<b>Total</b>	400	ISA <sup>2</sup>		

### 6.5.12.3 Breakdown of ISA funding per budget year

Budget	Anticipated allocations	Executed budget (in
--------	-------------------------	---------------------

Year	Phase	(in KEUR)	KEUR)
2016	Planning	90	
2016	Executing	250	
2016	Closing	30	
2017	Monitor & Control	30	

### 6.5.13 ANNEX AND REFERENCES

Description	Reference link
Articles 4 and 17 TEU	<a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:083:0013:0046:EN:PDF">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:083:0013:0046:EN:PDF</a>
Articles 258 and 260 TFEU	<a href="http://eur-lex.europa.eu/JOHtml.do?uri=OJ:C:2010:083:SOM:EN:HTML">http://eur-lex.europa.eu/JOHtml.do?uri=OJ:C:2010:083:SOM:EN:HTML</a>
Decision 2002/47/CE, CECA, Euratom for document management rules	OJ L 21, 24.1.2002, p. 23–27
Annual Reports on monitoring the application of Community law	<a href="http://ec.europa.eu/eu_law/infringements/infringements_annual_report_en.htm">http://ec.europa.eu/eu_law/infringements/infringements_annual_report_en.htm</a>
Communication 'A Europe of results – Applying Community law' (the 2007 Communication)	COM (2007) 502
Communication on the application of Article 260 (3) TFEU	<a href="http://ec.europa.eu/eu_law/infringements/infringements_260_en.htm">http://ec.europa.eu/eu_law/infringements/infringements_260_en.htm</a>
Framework Agreement between the Commission and the European Parliament (Section on 'Monitoring the application of Community law')	<a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:304:0047:0062:EN:PDF">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:304:0047:0062:EN:PDF</a>
Public access to documents relating to infringement proceedings	SEC(2003)260/3 <a href="http://www.cc.cec/sg_vista/cgi-bin/repository/getdoc/COMM_PDF_SEC_2003_0260_3_EN.pdf">http://www.cc.cec/sg_vista/cgi-bin/repository/getdoc/COMM_PDF_SEC_2003_0260_3_EN.pdf</a>
Monitoring the application of community law: manual of procedures	SEC(2005)254/5 <a href="http://www.cc.cec/sg_vista/cgi-bin/repository/getdoc/COMM_PDF_SEC_2005_0254_5_EN.pdf">http://www.cc.cec/sg_vista/cgi-bin/repository/getdoc/COMM_PDF_SEC_2005_0254_5_EN.pdf</a>