



IPEX XML Project

overview

ECPRD - ICT Working Group Meeting 2009 Rome, 26-27 November 2009

Gianpaolo Araco – Enrico Stronati





IPEX XML Project – background

- The key for success of a cooperative network like IPEX is <u>active</u> <u>participation</u>
- National Parliaments must <u>dedicate human resources</u> in information upload in order to keep IPEX database updated
- IPEX is attractive as much as the information stored in the database is promptly updated and of high quality





Automatic information upload

- Information feed from the European Commission was already automatic (U-Greffe)
- Information upload from National Parliament to be made automatic in order to:
 - Avoid or strongly reduce manual workload
 - Timeliness in information update (almost synchronous with internal scrutiny process)
 - Increase information quality
- Challenges:
 - different ICT infrastructure
 - different scrutiny process
 - different application platform





Solution adopted

- An open solution interoperable and widely adopted:
 - Easy to be implemented
 - Human readable (this helps in case of debugging or amendment of uploaded information)
 - Easy to be extended in order to follow modification in requirement (the institutional background)
 - Can be implemented in almost any environment (no matter which programming language or database is adopted by the NP)
 - The transmission channel must be acceptable by security policies in force both in the EP and in NPs

XML + web services





Why XML?

- It is a simple text file:
 - Easy to be implemented
 - Human readable
- Could be created with a lot of different programming tools:
 - All programming platforms have libs to build it
- It improves data quality:
 - No manual upload, no human mistakes
 - Validation procedure ensures data quality and data relation
- It improves uploading performance:
 - Uploading process is perfored by means of automatic systems

XML is a standard in data exchange



XML Schema

- It "represents the agreement" between NPs and IPEX web site:
 - It allows to have only valid document uploaded on the IPEX DB
- Each new element will be considered as optional in order to:
 - Avoid mandatory changes in applications if new elements are introduced
 - Cope with different scrutiny procedures in NPs
 - Keep old XML documents valid
- It is hosted on the IPEX web site





XML feed: <scrutinyPage/> example

```
<?xml version="1.0" encoding="UTF-8"?>
      💻<scrutinγPage chamber="ITSEN"
3
           |xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
           xsi:noNamespaceSchemaLocation="scrutinyPage.xsd">
 5
           <reference importType="document">
 6
             <code>COM</code>
             <year>2007</year>
             <number>0091</number>
 \exists
9
           </reference>
10
           <scrutiny>
           <documentLinks>
14
           <usefulLinks>
40.
46
           <contacts>
        </scrutinyPage>
54
```





<documentLinks>

XML feed: National Parliament scrutiny page



Scrutiny information

Scrutiny by Committee on Justice with opinion by Committee on Eu affairs.

The Committee on eu affairs started consideration on 29 may 2007.

On 30 may 2007 the Committee on Eu affairs issued a favourable opinion with the following observations:

- a rapid approval and transposition of the proposal is important in order to meet Lisbon's goals, in particular those concerning economic growth and competitiveness, without nevertheless compromising the fundamental guarantees contained in Eu and national legislation
- during transposition of the proposal, it is recommended that rights of shareholder and creditors of public limited companies involved in mergings and divisions are taken into account, through the emphasizing of the functions of Consob (the National Committee on Companies and Stock-exchange).

(italian version)



Since the Committee on justice after 15 days of receiving the opinion had expressed itself on the proposal, on 31 july 2007 the COmmitte on Eu affaires closed the scrutiny and asked the Senate that the opinion would be sent to the Government (article 144,5 of Senate's Rules of proceding)

Contact points for EU matters

Specific Contacts: Mr Davide Capuano - Email - Phone: 00390667063477

<contacts>

IPEX correspondent: Ms Agostini -





Why web service?

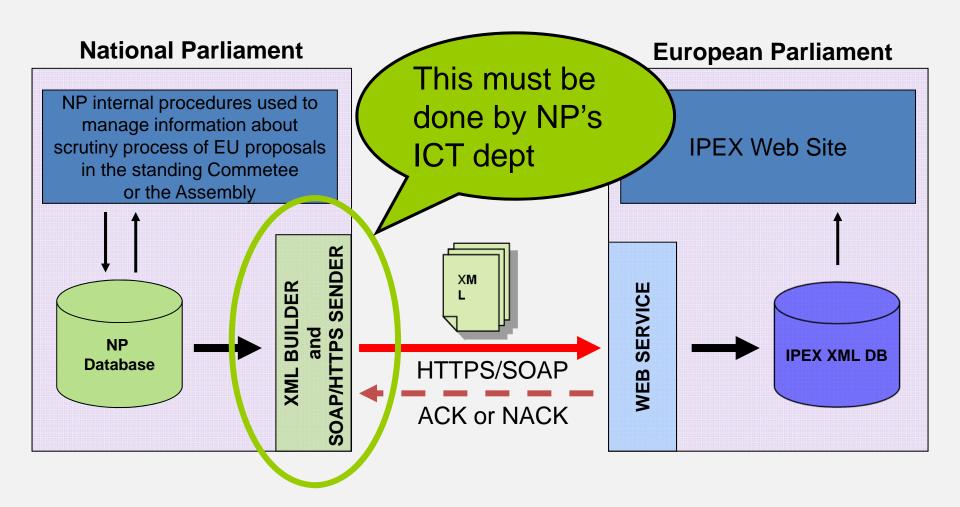
- It ensures interoperability between different architectures:
 - W3C quotation: system designed to support interoperable machine-tomachine interaction over a network
- It has an interface described in a format that can be automatically elaborated (Web Services Description Language - WSDL)
- It allows interaction between IPEX and NP system:
 - Using SOAP messages (it is the basic messaging framework)
 - Using HTTP (it is the transmission and it works fine with network firewalls)
 - Using SSL with simple encryption (encryption transport protocol layer, it uses a certificate from the IPEX server to the NP)

WS is a common standard interoperability mechanism





XML feed: infrastructure overview







XML feed: web service architecture platform overview

- Platform:
 - Red Hat Enterprise Linux (RHEL)
 - Apache
 - JBoss 4.0.5
- Data repository:
 - Oracle 9i
- Communication channel:
 - SOAP over HTTPS





Questions?

Gianpaolo Araco

gianpaolo.araco@senato.it

Enrico Stronati

stronati e@camera.it