Bytes & Brussels Working in IT at EU Institutions

Smart Monday April 2025



- Thank you
- Me in 5 words
- Disclaimer



What are the EU institutions?

27 countries, 23 languages, ~80.000 staff

- 3 big ones:
 - Parliament (Bxl, Lux, Strasbourg)
 - Commission (Bxl & Lux)
 - Council (Bxl)
- Other institutions:
 - Court of Justice (Lux)
 - European Central Bank (Frankfurt)
 - Court of Auditors (Lux)
 - Committee of the Regions (Bxl)
 - Economic and social Committee (Bxl)
 - External Action Service (Bxl & World)

- Agencies (50+ EU)
 - Fish (Spain)
 - Medicines (Netherlands)
 - Training (Hungary)
 - •



Why work for the EU institutions?

- Public sector
- Make Europe/the world a better place
- Not for profit
- International environment
- Work/life balance
- Salary & benefits
- Training
- Career change possible

Why work in IT for the EU institutions?

Large & complex systems



Why not work for the EU institutions?

- Public Sector
- Bureaucracy
- Slow change
- No fast career
- Political



How to work for the EU institutions?

- EPSO competitions
- Contract agents
- Temporary agents

How to work in IT for the EU institutions?

Consultants/Externals (remote)



What do we do in the EU institutions?

- Produce legislative documents
- Translate (= produce more documents)



What do we do in IT in the EU institutions?

- Administration of the administration
- Document management systems
- Example of projects
 - EdiT: work on legislative document in XML (Akoma Ntoso)
 - Machine translation: eTranslation
 - Custom HR system
 - Electronic signature
 - Record management system



What is special in the EU institutions?

- Political
- Working with member states
- Public money Procurements
 - Call for tenders
 - Framework contracts
 - OLAF



What is special in IT in the EU institutions?

- Multilingualism
- Cybersecurity
- Division of work between civil servants & externals
- Regulations
- Open Source
- Data sensitivity classification
- Gap in technical knowledge



Which IT tools in the EU institutions?

- Windows/Office
- Teams
- Jira/Confluence
- SAP
- ServiceNow
- Git
- Java/.Net
- Angular
- Oracle
- Cloud: AWS/Azure
- PowerBI / Business Objects



Cyber Security in the EU institutions

- ENISA (Greece): European Union Agency for Cybersecurity
- EU-CERT: Cybersecurity Service for the EU institutions, bodies, offices and agencies
- Cybersecurity Regulation
- Awareness campaign
- Code scan
- Zero trust
- Keep libraries/frameworks/components up to date
- Keep OS/System up to date (patching)
- Phishing exercise
- Firewall
- Vulnerability scan
- Red team



Open Source in the EU institutions?

Started in 2000 but really accelerated in 2014 (Heartbleed bug)



- Free and Open Source Software Auditing (EU-FOSSA)
- Open source software strategy 2020-2023

https://code.europa.eu/



Application Architecture

- Technological choices/limitations
- Cloud first
- I18N
- Business & functional logging
- Identity & Access Management
- Data
- Document generation
- UI/UX Design System
- Testing
- Pipelines DevSecOps

Methodology PM²



Enterprise Architecture

- Application vs Solution vs Enterprise Architect
- IT landscape Vision & Strategy
- Roadmap
- Technology debt
- Business Process Management
- Data Analytics & Reporting
- Cybersecurity



Studies vs Reality

- Continuum mechanics
- Quantum physics
- Organic chemistry
- Compiler theory
- Network OSI layers
- Operating System principles
- Pascal
- FORTRAN
- Database: 1NF, 2NF, ...
- Boolean algebra
- Algorithms

- English
- PowerPoint
- Project management methodology
- Negotiation
- Conflict management
- People management
- Interview
- Hybrid teams
- Employment legislation

Conclusions

Thank you.

Questions?