Das EDQM – Mehr als das Arzneibuch

Fachgruppe Arzneimittelanalytik / DPhG
Freiburg
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- The European Pharmacopoeia
- Certification of Suitability Procedure
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- Anti-counterfeiting Activities
- Pharmaceutical Care

The Council of Europe

- Founded in 1949
- Development of European common and democratic principles
- 47 member countries
- Headquarters in Strasbourg
- Core values :
  - protection of human rights
  - pluralist democracy & the rule of law

edqm European Directorate for the Quality of Medicines & HealthCare

COUNCIL OF EUROPE CONSEIL DE L'EUROPE

European Directorate for the Quality of Medicines & HealthCare (EDQM)

- A Council of Europe Directorate, based on the Convention on the Elaboration of a European Pharmacopoeia (PA, 1964)
- Mission: to contribute to a basic human right: access to good quality medicines and healthcare

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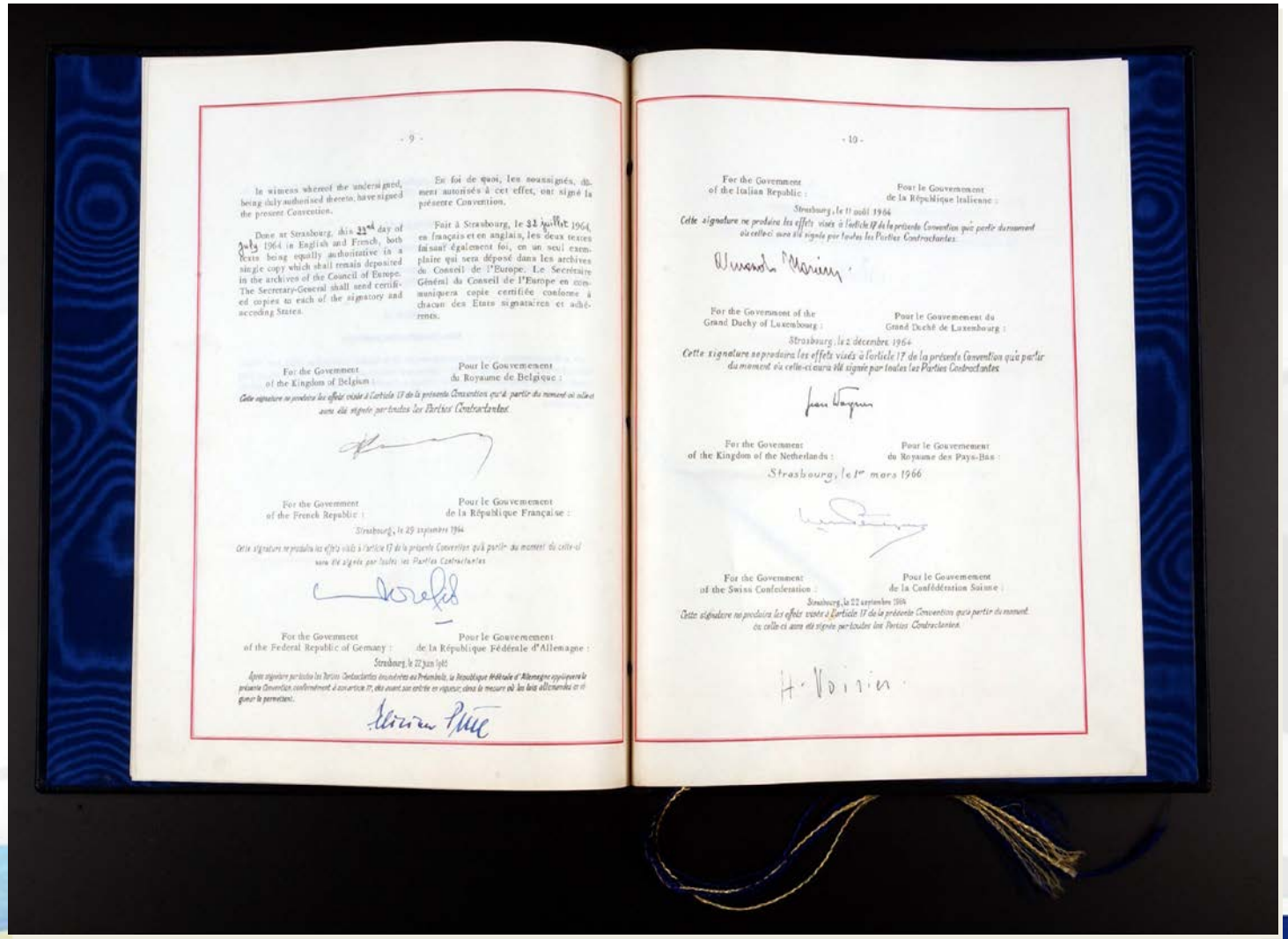
European Pharmacopoeia Convention



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In witness whereof the undersigned, being duly authorised thereto, have signed the present Convention.

Done at Strasbourg, this 22nd day of July 1964 in English and French, both texts being equally authoritative in a single copy which shall remain deposited in the archives of the Council of Europe. The Secretary-General shall send certified copies to each of the signatory and acceding States.

En foi de quoi, les soussignés, dûment autorisés à cet effet, ont signé la présente Convention.

Fait à Strasbourg, le 22 juillet 1964, en français et en anglais, les deux textes faisant également foi, en un seul exemplaire qui sera déposé dans les archives du Conseil de l'Europe. Le Secrétaire Général du Conseil de l'Europe en communiquera copie certifiée conforme à chacun des Etats signataires et adhérents.

For the Government of the Kingdom of Belgium :

Pour le Gouvernement du Royaume de Belgique :

Cette signature ne produira les effets visés à l'article 17 de la présente Convention qu'à partir du moment où celle-ci aura été signée par toutes les Parties Contractantes.

For the Government of the French Republic :

Pour le Gouvernement de la République Française :

Strasbourg, le 29 septembre 1964

Cette signature ne produira les effets visés à l'article 17 de la présente Convention qu'à partir du moment où celle-ci aura été signée par toutes les Parties Contractantes

For the Government of the Federal Republic of Germany :

Pour le Gouvernement de la République Fédérale d'Allemagne :

Strasbourg, le 22 juin 1965

Après signature par toutes les Parties Contractantes énumérées au Préambule, la République Fédérale d'Allemagne appliquera la présente Convention, conformément à son article 17, dès avant son entrée en vigueur, dans la mesure où les lois allemandes et ce dernier le permettent.

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For the Government of the Italian Republic :

Pour le Gouvernement de la République Italienne :

Strasbourg, le 11 août 1964

Cette signature ne produira les effets visés à l'article 17 de la présente Convention qu'à partir du moment où celle-ci aura été signée par toutes les Parties Contractantes.

For the Government of the Grand Duchy of Luxembourg :

Pour le Gouvernement du Grand Duché de Luxembourg :

Strasbourg, le 2 décembre 1964

Cette signature ne produira les effets visés à l'article 17 de la présente Convention qu'à partir du moment où celle-ci aura été signée par toutes les Parties Contractantes

For the Government of the Kingdom of the Netherlands :

Pour le Gouvernement du Royaume des Pays-Bas :

Strasbourg, le 1er mars 1966

For the Government of the Swiss Confederation :

Pour le Gouvernement de la Confédération Suisse :

Strasbourg, le 22 septembre 1964

Cette signature ne produira les effets visés à l'article 17 de la présente Convention qu'à partir du moment où celle-ci aura été signée par toutes les Parties Contractantes.

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From the European Pharmacopoeia...

- 1964: Convention on the elaboration of a European Pharmacopoeia
- 1975: Mandatory status for the EU/EEA member states via EU pharmaceutical legislation
- 1994: creation of the European Network of Official Medicines Control Laboratories (OMCL)
- 1994: certification procedure for active substances turned into routine

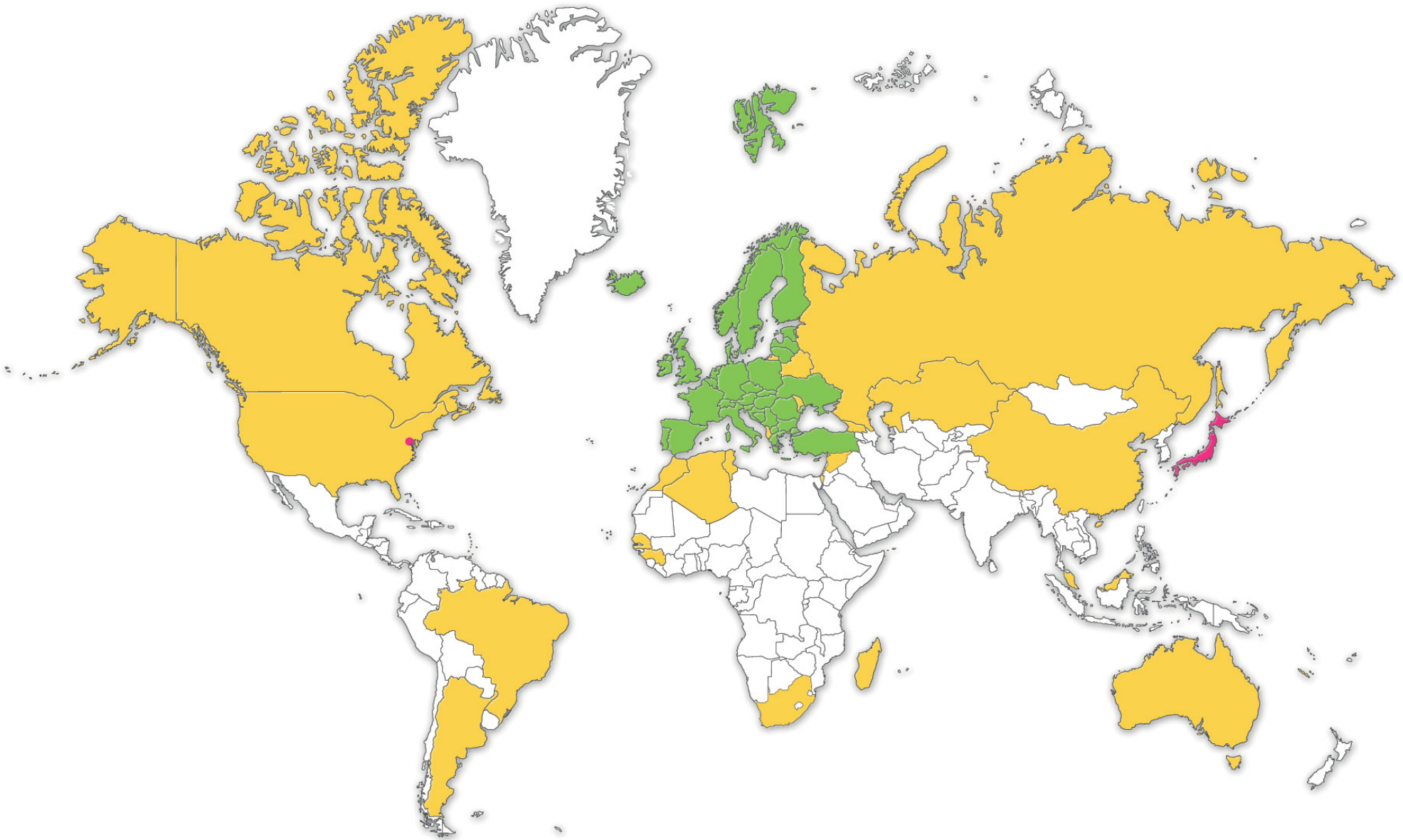
… to the EDQM

- 1996: change of name to European Department for the Quality of Medicines
- 2007: transfer of healthcare activities - blood transfusion & organ transplantation
- 2007: change of name to “& HealthCare”
- 2008: transfer of pharmaceuticals/ pharmaceutical care related activities
- 2009: transfer of cosmetics and food packaging material-related activities

Membership & Observership

- 37 member states + the European Union
- Ph. Eur. is the official Pharmacopoeia in Europe common to all member states – national pharmacopoeias to cover subjects of solely national interest
- 24 observer countries and the World Health Organization (WHO)

Members and Observers



European Pharmacopoeia Activities

European Pharmacopoeia & Its Legal Status

- Lays down common, compulsory standards
- Mandatory at the same date in 37 CoE member states and the EU
- Legally binding quality standards for ALL medicinal products in the member states, i.e. raw materials, preparations, dosage forms, containers must comply with the Ph. Eur. requirements when they exist

Ph. Eur. Commission

- One delegation per member state or observer
- 37 Member States plus a delegation from the EU (a representative from DG Health & Consumer and the EMA); 24 Observer countries and World Health Organization (WHO).
- Persons come from health ministries, health authorities, pharmacopoeias, universities, or industry and are appointed by the national authorities on the basis of their expertise.
- Three sessions a year; texts are adopted by unanimous vote.
- Currently 20 permanent Groups of Experts & 50 ad hoc Working Parties
- One Secretariat: EDQM

How Quality Standards Are Regularly Reviewed and Revised To Stay 'State of the Art'

Developments in Regulatory Environment
e.g. Guidelines, ICH Q8/Q9/Q10/Q11, REACH

Increased demand for Generic and Biosimilar products
e.g. New sources

Need to regularly review and update Ph Eur texts
Need to create new texts

Scientific / technical evolutions
e.g. Fast LC, NIR, PAT, new molecules, new therapies
e.g. CT

New risks to Public Health
e.g. Genotoxic impurities, TSE, contamination/ falsification (heparins)

Developments in Manufacture and Globalisation
e.g. continuous manufacturing, changed routes of synthesis

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Current «Hot Topics»

- Implementation of «QbD»
- Control of metal catalysts and residues
- Finished Product Monographs – pilot project
- International Harmonisation
- Biosimilars
- ATPs
- ….

Certification of Suitability to the Monographs of the Ph.Eur.

Certification Procedure

- Under EU legislation for medicinal products, the Marketing Authorisation applicant is required to demonstrate that the Ph. Eur. monograph is able to control the quality of the active substances used (impurity profile)
- The Certification procedure as a centralised way
- Direct collaboration of European Authorities
- Scope: Worldwide

Dossier Evaluation

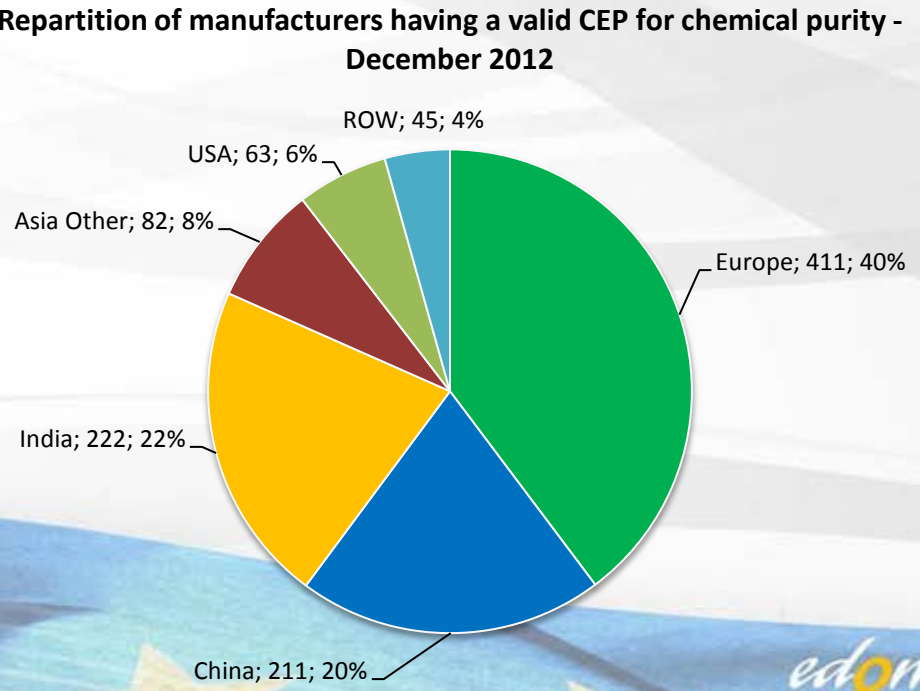
- With quality assessors from the Ph. Eur member states
- Dossiers sent to EDQM by manufacturers of pharmaceutical substances
- Quality of substances assessed against the Ph. Eur. monograph(s) and other regulatory requirements
- In the positive outcome, a CEP is granted (official certificate)
- Facilitates management of Marketing Authorisations in Europe for medicines for both authorities and industry. CEPs are accepted in Ph. Eur. Member States and beyond, e.g. Australia, Canada, Singapore, South Africa....

Inspection of Manufacturing Sites

- With official inspectors from the Ph. Eur Member States
- Risk based selection of manufacturing sites to verify
  - Accuracy of/compliance with submitted dossier
  - Compliance with Good Manufacturing Practices (GMP)
- Mainly in Asia (India, China,...)
- Collaboration also with Australian, Canadian, US authorities, WHO

Figures

- > 5000 applications received
- More than 3500 valid certificates
- # 1000 manufacturers from 56 countries



Figures (2)

- >250 inspections of manufacturing sites, in 26 countries
  - >20% found non-compliant
  - Leading to suspension/cancellation of certificates
- Outcome demonstrates the need for finished product manufacturers to have a better control of their suppliers!

OMCL Network & Biological Standardisation

Dr Susanne Keitel

Quality Control of Medicines

- Reasons:
  - Quality defects (e.g. contaminations)
  - Counterfeit and Illegal products (e.g. “traditional” Chinese medicines)
  - Major impact on health
- Official Medicines Control Laboratories (OMCLs): Independent re-testing of key parameters for medicines
  - Pre-marketing: for vaccines and blood-derived products
  - Post-marketing: market surveillance

European OMCL Network: Concerted Effort in Medicines Control

- 75 OMCLs from all Ph. Eur. signatory states
  - Control of human & veterinary medicines
- Sharing of work, equipment, competences
- Mutual recognition of results
- Saving of costs
- Financial support from EU

Biological Standardisation Programme

- Goals: Provide tools for independent re-testing of biologicals (e.g. vaccines, blood- & biotech products)
  - Standardisation of methods
  - Establishment of reference standards
  - Replacement of animal tests
- Financial support by EU

Anti-Counterfeiting Activities

CoE/EDQM Anti-Counterfeiting Strategy

Multisectorial training

Inspection

Testing

Anti-Counterfeiting Activities Medicrime Convention

Convention on the counterfeiting of medical products and similar crimes involving threats to public health

- Support of promotion and application
  - Trainings & seminars
  - Knowledge transfer
  - Help in identifying counterfeits
  - Network of SPOCs

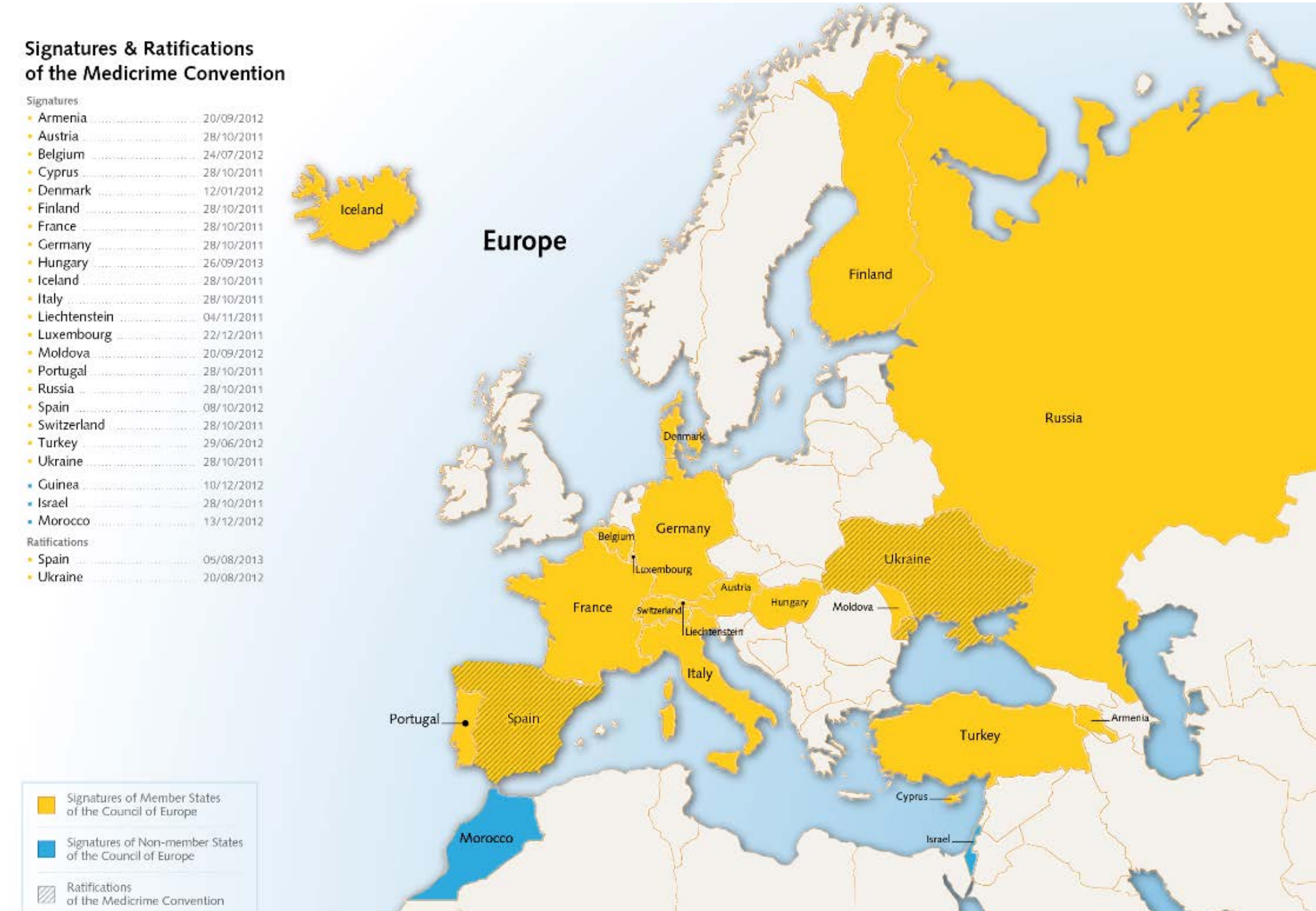
Signatures & Ratifications of the Medicrime Convention

Signatures

- Armenia 20/09/2012
- Austria 28/10/2011
- Belgium 24/07/2012
- Cyprus 28/10/2011
- Denmark 12/01/2012
- Finland 28/10/2011
- France 28/10/2011
- Germany 28/10/2011
- Hungary 26/09/2013
- Iceland 28/10/2011
- Italy 28/10/2011
- Liechtenstein 04/11/2011
- Luxembourg 22/12/2011
- Moldova 20/09/2012
- Portugal 28/10/2011
- Russia 28/10/2011
- Spain 08/10/2012
- Switzerland 28/10/2011
- Turkey 29/06/2012
- Ukraine 28/10/2011
- Guinea 10/12/2012
- Israel 28/10/2011
- Morocco 13/12/2012

Ratifications

- Spain 05/08/2013
- Ukraine 20/08/2012



Anti-Counterfeiting Activities (1) eTACT

EDQM Anti-counterfeiting Traceability Service for Medicines

- Mass serialisation tool to trace packs of medicines at every step of the supply chain for preventing counterfeiting
- Unique Medicine Identifier on outside package

EDQM Traceability Service eTACT

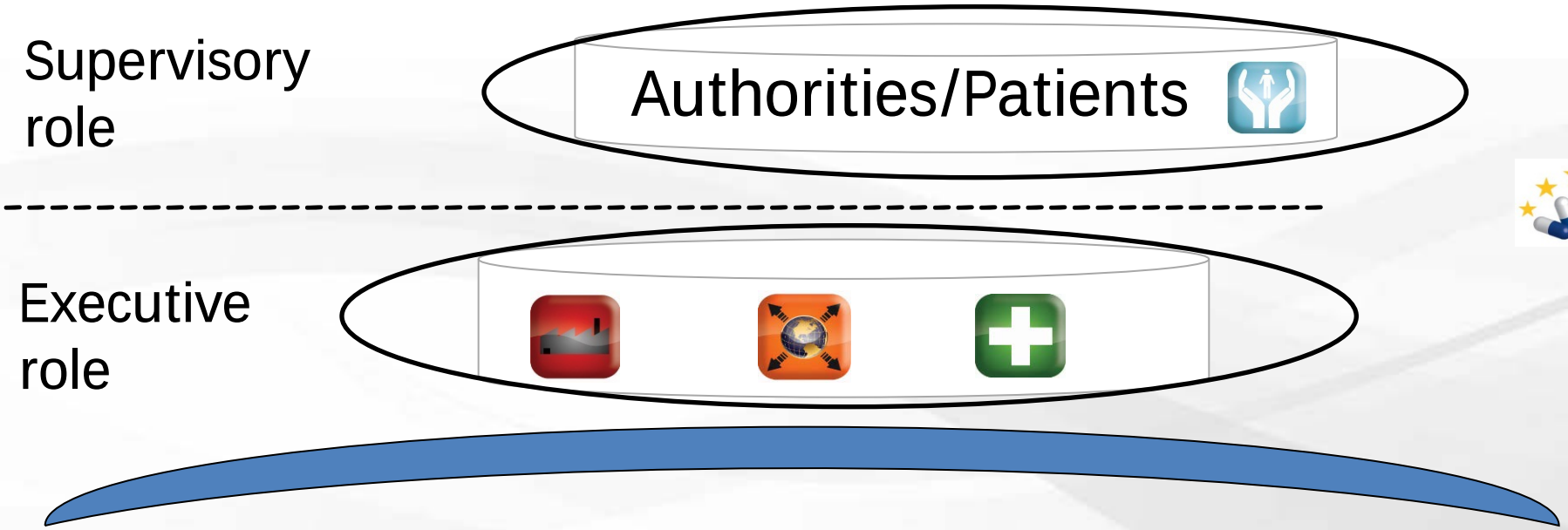
Generation of UMI = **U**nique **M**edicine **I**dentifier

NOT a Track&Trace / pedigree system

Verification of UMI

Verification of UMI

Efficient public governance



Proposal for future coding

	GTIN (01) 07680303330054 SERIAL (21) 0402748246 Batch (10) 144GC1214 EXPIRY (17) 111120 NHRN (710) 049-75241456

GTIN: product number
Serial: randomised number
Batch No.
Expiry date: yymmdd
NHRN: National Health Reimbursement Number

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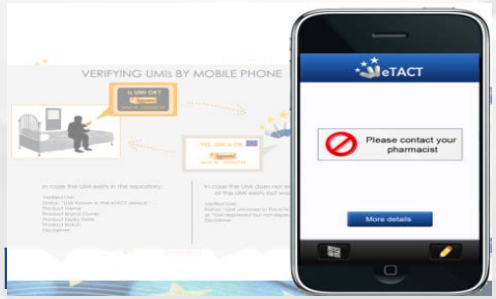
Added value of eTACT project



- ⇨ Public governance
- ⇨ Patient access
- ⇨ Flexibility
  - ⇨ centralisation/decentralisatio
  - ⇨ Use of global standards
- ⇨ EDQM experience in facilitating pan-European approach

Pharmaceutical Care

The Need for Pharmaceutical Care

- **Problem:** patient mortality, morbidity, loss in quality of life, reduced working capacity, waste of resources due to inappropriate use of medicines by prescribers and dispensers and patients
- **Solution:** implementation/monitoring/follow-up of ***pharmaceutical care**** **model and working methods**
- Development/validation of pragmatic indicators, covering 5 key domains of pharmaceutical care process ("basic set" of indicators).

* **Hepler & Strand (1989;1990)**

Examples of Validation Studies

1. Indicator: Impact of pharmacist's intervention on **adherence** to **clinical practice guidelines** in **prescribing antibiotics** for certain acute infections

Patients (%) prescribed in compliance **after** pharmacist's intervention - patients (%) prescribed in compliance **before** pharmacist's intervention

2. Indicator: Data linkage – responsible anticoagulant treatment vitamin K-antagonists

Anti-coagulated patients with risk for bleeding event whose medical & prescription data were available to prescriber and pharmacist
All anti-coagulated patients with risk for bleeding event

Validation Studies - Opportunities

EDQM studies (5 indicator sets) sponsored by European Committee on Pharmaceuticals and Pharmaceutical Care ' validated conditions of use for study setting (2013-2014)

- EDQM indicators = pragmatic/ developed by national experts (academia, officials)
- Public governance; non-profit, independent, multidisciplinary;
- Validated indicators will be available to health authorities (no fees)
- **Implementation / Follow-up**: guidance/policy-recommendation (basic set indicators); on-going platform for authorities

Conclusion

EDQM's activities contribute to:

- protecting public health;
- fostering animal welfare;
- ensuring economical use of member states' resources;

..... and have a big international impact beyond Europe