Pharmaceutical
Inspection
Co-operation
Scheme (PIC/S)



40 years of Co-operation & Mutual Confidence

Jacques Morénas
Deputy Director
Inspectorate and Companies Department
The French Health Products Safety Agency (AFSSAPS)
telephone: 33 1 55 87 39 17

e-mail: jacques.morenas@afssaps.sante.fr



Overview

- History
- Role & functions of PIC/S
- Accession procedure
- Guides & recommendations
- Seminars & expert circles
- Other training tools
- Quality systems for inspectorates
- Joint re-assessment program
- Liaison with other organisations
- Typical PIC/S inspection of a medicinal product manufacturer
- Moving forwards
- PIC/S contacts



Original goals

- ✓ Harmonised GMP requirements
- Mutual recognition of inspections
- ✓ Uniform inspection systems
- ✓ Training of Inspectors
- ✓ Mutual confidence



PIC = Pharmaceutical Inspection Convention

- Founded by The European Free Trade Association (EFTA) in October 1970
- > Is a legal Treaty between countries
- Initially only 10 member countries: Austria, Denmark, Finland, Iceland, Liechtenstein, Norway, Portugal, Sweden, Switzerland and UK.



PIC membership as at January 1995

18 Member countries:

Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Liechtenstein, Norway, Portugal, Romania, Sweden, Switzerland, United Kingdom.



Reasons for creating the PIC Scheme

- > After 1993, no new members of PIC possible
- Reasons:
- Under EU law, only European Commission authorised to sign agreements with other countries
- Expansion of PIC not possible unless European Commission became a member of PIC
- Amendment of Convention difficult & lengthy
- Inspectorates (& industry) favoured maintaining the principles of PIC
- Consequently, the PIC Scheme was developed & implemented.

PIC Pharmaceutical Inspection

Convention

PIC Scheme Pharmaceutical Inspection

Cooperation Scheme

Both operate in parallel under the logo/abbreviation





Main features of PIC Scheme

- Commenced operating on 2 Nov. 1995
- An informal arrangement between Agencies
- Networking and confidence building
- Exchange of information and experience on GMP
- Development of Quality Systems for Inspectorates
- Training of inspectors
- International harmonisation of GMP
- No obligation to accept inspection reports
- PIC & PIC/S operate in parallel jointly referred to as "PIC/S"



PIC/S Goal

"To lead the international development, implementation and maintenance of harmonised GMP standards and quality systems if inspectorates in the field of medicinal products".



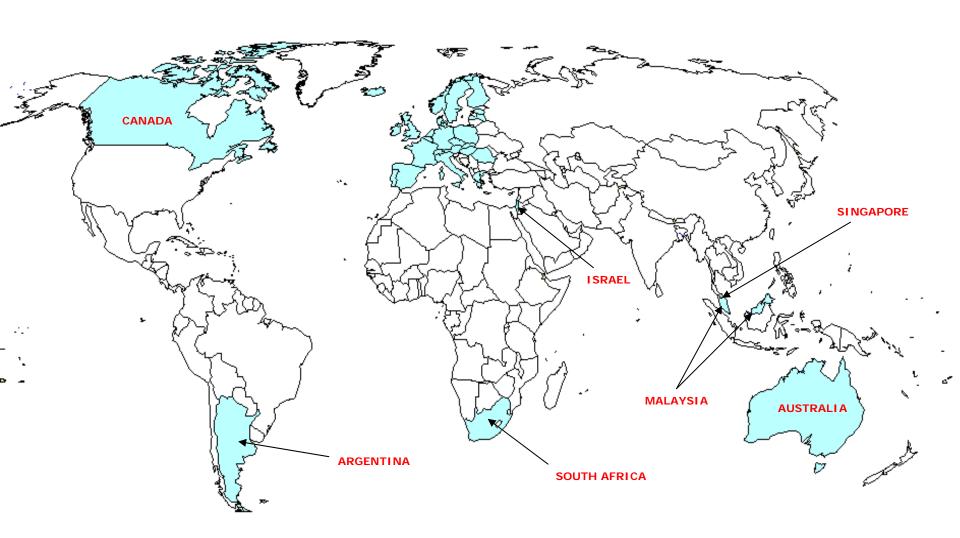
Achievement of PIC/S Goal

PIC/S Goal to be achieved by:

- Developing and promoting harmonised GMP standards and guidance documents.
- Training competent authorities, in particular GMP inspectors.
- ✓ Assessing (and reassessing) GMP Inspectorates.
- Facilitating the co-operation and networking for competent authorities and international organisations.

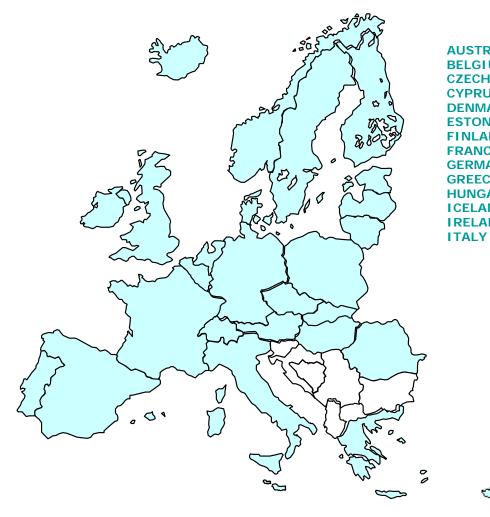
37 PIC/S Members





PIC/S Members (Europe)





AUSTRIA
BELGIUM
CZECH REP. (Human & Vet)
CYPRUS
DENMARK
ESTONIA
FINLAND
FRANCE (Human & Vet)
GERMANY
GREECE
HUNGARY
ICELAND
IRELAND

LATVIA
LIECHTENSTEIN
LITHUANIA
MALTA
NETHERLANDS
NORWAY
POLAND
PORTUGAL
ROMANIA
SLOVAK REPUBLIC
SPAIN
SWEDEN
SWITZERLAND
UNITED KINGDOM



PIC versus PIC/S

PIC

PIC/S

- Convention
- Between countries
- A formal treaty
- Has legal status
- Focus on inspection
- Mutual recognition of inspections

- Scheme
- Between agencies
- An informal arrangement
- Has no legal status
- □ Focus on training & Developing guidelines
- Exchange of information



Benefits of PIC/S Membership

- ✓ Accession forced improvements i.e. discipline
- Cost saving import control mechanism
- ✓ Facilitated exports of medicines
- ✓ Training (seminars, Joint Inspections, etc.)
- ✓ Involvement with developing international GMPs
- ✓ Facilitated MRA with EC
- ✓ Networking & personal contacts



How PIC/S operates

- PIC/S Committee
- Secretariat
- Executive Bureau : Chairman, two Deputy Chairmen, past Chairman, two Members of PIC/S Committee, two alternate Members
- Small Budget
- Good relationship and collaboration
- Training opportunities
- Exchange of information, rapid alerts
- Development of GMP guidelines



Useful Documents

- Pharmaceutical Inspection Cooperation Scheme (PIC/S 1/95)
- Guidelines for Accession to PIC/S (PIC/S 1/98)
- Application form and Questionnaire on National Inspection Systems (PS 2/99)
- Recommendations on quality system requirements for pharmaceutical inspectorates (PI 002)



Steps to accession

- General interest & commitment, eg. attend Seminars
- Written application to Secretary + supporting documents
- PIC/S Committee appoints Rapporteur to evaluate
- Applicant invited to Committee meeting to answer questions of Rapporteur and Committee
- PIC/S delegation undertakes assessment visit (Inspectorate's procedures; observe 3 or 4 inspections)
- Delegation report issued (to applicant & Committee)
- > Committee decides on membership.



Accession to PIC

Accession to PIC/S

Austria	May 1971
Denmark	May 1971
Finland	May 1971
Iceland	May 1971
Liechtenstein	May 1971
Norway	May 1971
Portugal	May 1971
Sweden	May 1971
Switzerland	May 1971
UK	May 1971
Hungary	Aug 1976
Ireland	Dec 1977
Romania	May 1982
Germany	Sep 1983
Italy	Aug 1990
Belgium	Sep 1991
France	Dec 1992
Australia	Jan 1993

Nov 1999
Nov 1995
Jan 1996
Nov 1995
Nov 1995
Nov 1995
Jan 1999
Feb 1996
Feb 1996
Jun 1999
Dec 1995
Feb 1996
Nov 1995
Dec 2000
Feb 2000
Feb 1997
Feb 1997
Nov 1995



Accession to PIC

Accession to PIC/S

Netherlands	-	Nov 1995
Czech Republic	-	Jan 1997
Slovak Republic	-	Jan 1997
Spain	-	Jan 1998
Canada	-	Jan 1999
Singapore	-	Jan 2000
Greece	_	Jan 2002
Malaysia	_	Jan 2002
Latvia	_	Jan 2003
Czech Rep (Vet)	-	Jul 2005
Poland	-	Jan 2006
Estonia	_	Jan 2007
South Africa	-	Jul 2007
Argentina	-	Jan 2008
Malta	-	Jan 2008
Cyprus	-	Jul 2008
France (Vet)	-	Jan 2009
Israel	-	Jan 2009
Lithuania	-	Jul 2009



Applicants being assessed for membership from:

- > Brazil
- China / Taiwan
- > Indonesia
- > Iran
- New Zealand
- Philippines

- > Slovenia
- > Thailand
 - > Ukraine
 - United Kingdom / Vet
 - > USA



Agencies showing interest in joining PIC/S. From:

- China / Hong Kong
- > Japan
- > Russia

- > Saudi Arabia
- > South Korea
- > Turkey



PIC/S GMP Guide

Virtually identical to EC GMP Guide (main difference = "Qualified Person" vs. "Authorised Person")

Basic GMP Guide (Part I)

GMP Guide for APIs (Part II)

Plus Annexes, covering:

- Sterile Medicinal Products
- Sampling of Starting Materials & Packaging Materials
- Pressurised Metered Dose Aerosols
- Liquids, Creams & Ointments
- Computerised Systems
- Radiopharmaceuticals



Plus annexes, covering notably:

- Biologicals
- Herbals
- Medicinal gases
- Use of Ionising Radiation
- Investigational Medicinal Products
- Products Derived from Human Blood & Plasma
- Qualification and Validation
- Parametric release
- Reference and Retention Samples



Development of GMP Guidance Documents

- Usually initiated at end of PIC/S Seminars
- PIC/S Working Group formed
- Author prepares draft
- Comments from Working Group
- Comments from PIC/S Inspectorates
- Comments from Industry
- Endorsed by PIC/S Committee for general distribution
- Simultaneous distribution by EMEA (& vice versa)



PIC/S works on validation

- 1994 PIC Seminar in Ireland on Validation identified need to develop guidance document
- PIC/S Recommendations prepared covering:
 - Validation Master Plan
 - Installation & Operational Qualification (IQ & OQ)
 - Non-sterile Process Validation
 - Cleaning Validation
- PIC/S entry into force on 1st March 1999
- Adopted by the EU as Annex 15 to EU GMP Guide



- ✓ PIC/S GMP Guide (similar to EU GMP Guide).
- ✓ PIC/S GMP Guide for Blood Establishments.
- ✓ PIC/S Guide to Good Practices for the Preparation of Medicinal Products in Healthcare Establishments.
- ✓ Validation (master plan, IQ/OQ, process, cleaning).
- ✓ Validation of Aseptic Processes.
- ✓ Inspection of Isolator Technology.
- ✓ Quality Systems for Inspectorates.
- ✓ Sterility Testing.
- ✓ Validation of Computerised Systems.



PIC/S Involvement in the ICH GMP Guide on APIs

- > PIC/S Conference in Canberra 1996:
 - consensus obtained to prepare international GMP.
- > PIC/S draft document prepared during '97 & '98.
- ICH Q7 took over the work of PIC/S mid-1998 to enable industry to become involved:
 - ICH involves 3 regions (USA, Europe & Japan).
- ICH GMP Guide finalised in November 2000 after extensive public consultation.
- Most countries have adopted ICH document as a GMP requirement for APIs by 1st April 2001 (EU).
- ICH document became Part II of PIC/S GMP Guide in 2007



- Packaging & Labelling
- Contamination
- Quality
- Sampling & Analytical Control
- Contract Manufacture & QC
- QC Department
- Stability
- Isolation/ID/Quantification of Drugs
- Tablet Manufacture
- Large Volume Parenterals
- PIC Basic GMP Guide (Need for Revision?)

Switzerland, 1971

Sweden, 1972

France, 1972

UK, 1973

Switzerland, 1974

Denmark, 1975

Austria, 1976

Sweden, 1977

UK, 1978

Norway, 1978

Finland, 1979



- Tablet Manufacture
- Manufacture of Active Ingredients
- Control Laboratory
- Validation
- Packaging
- Production of Biological Products
- Premises
- Plastics
- Inspection

Denmark, 1980

Switzerland, 1980

Hungary, 1981

Ireland, 1982

Portugal, 1983

Germany, 1984

Norway, 1985

Sweden, 1986

UK, 1987



Water

- Contamination Risk in the Manufacture

of Parenterals

Blood & Blood Products

Audit - Pharmaceutical Inspection

Products Derived from Biotechnology

 Inspection & Testing in Relation to the Marketing Authorisation

Qualification & Validation

Manufacture of Sterile Products

Computer Systems

- GMP Standards for APIs

Switzerland, 1988

Austria, 1989

Denmark, 1990

Hungary, 1991

Italy, 1992

Belgium, 1993

Ireland, 1994

Iceland, 1995

Australia, 1996

Australia, 1996



- Manufacture & Inspection of APIs
- Quality Systems for Inspectorates
- Non-technical Aspects of Inspection
- Biotechnology
- Inspection of Utilities
- Interface between GCP and GMP
- Inspection of QC laboratories
- Inspection of APIs
- Primary packaging, labelling and prevention of mix-up
- Risk Management
- Solid Dosage Form Manufacturers
- Good Distribution Practices
- Sterile Aseptic Manufacturing

Finland, 1997

Holland, 1998

UK, 1999

France, 2000

Czech Rep, 2001

Canada, 2002

Slovak Rep, 2003

Spain, 2004

Romania, 2005

Germany, 2006

Singapore, 2007

Poland, 2008

Sweden, 2009



Future PIC/S Seminars

Herbal / Traditional Medicines

Good Inspection Practices

Malaysia, 2010

South Africa, 2011



Expert Circles / Working Groups

- ✓ APIs
- Computerised Systems
- ✓ Human Blood and Tissues
- Quality Risk Management
- ✓ Good Distribution Practices

Aim: Develop draft guidance documents

Training in specialised field



Other training tools

PIC/S Joint Visits

- Started in 1987
- Around 25 groups of 3 inspectors from 3 countries
- 1 inspection per year per country
- for training purposes
- for uniform GMP interpretation
- > for uniform inspection procedures
- > for mutual confidence

Quality system requirements for pharmaceuticals inspectorates

Main topics

- Quality Improvement and Corrective / Preventive Action
- Complaints
- Issue and Withdrawal of Licences and GMP certificates
- Handling Suspected Quality Defects and Rapid Alert System
- Liaison with OMCL
- Sub-Contracting and Assessing

Quality system requirements for pharmaceuticals inspectorates

Main topics

- Quality Manual
- Administrative Structure
- Organisation and Management
- Documentation and Change Control
- Records
- Inspection Procedures
- Inspection Resources
- Internal Audit

Quality system requirements for pharmaceuticals inspectorates

- Reference document : PI 002-3
- Purpose: adopting a common standard for quality system requirements in order to achieve consistency in inspection standards between National Pharmaceutical Inspectorates and thus to facilitate mutual recognition of those Inspectorates



Joint Reassessment programme

Goals

- ❖ To verify that PIC/S member authorities maintain compliance with the requirements of the Scheme (as described in paragraph 8 of the Scheme [PIC/S 1/95 modified]).
- To verify the implementation of quality system requirements for pharmaceutical inspectorates.
- To help maintain consistency among PIC/S member authorities



Liaison with other organisations

- ✓ The European Department for the Quality of Medicines (EDQM): Associated Partnership negotiated in 2007,
- ✓ The European Medicines Agency (EMA):
 Associated Partnership negotiated in 2007
- ✓ UNICEF: Associated Partnership negotiated in 2008,
- ✓ WHO: Co-operation Arrangement negotiated in May 2009
- ✓ ICH,
- ✓ European Commission (DG Health & Consumers)

Typical PIC/S inspection of a medicinal product manufacturer

Before the inspection:

- Lead inspector assigned.
- Inspection team selected.
 - Technical specialist sometimes included on team
- Company notified.
 - Company requested to provide Site Master File (SMF)
- Inspection team reviews documentation.
 - SMF, complaints, recalls, testing failures, marketing authorisations.
- Lead inspector prepares inspection plan & sends to company.
- > Inspection conducted.

Typical PIC/S inspection of a medicinal product manufacturer

After the inspection:

- Caucus of inspection team.
- Interim inspection report prepared (deficiencies only).
- Exit interview with company:
 - Attendance sheet completed.
 - Interim inspection report provided (discussion encouraged).
 - Written response requested within 4 weeks.
- Objective evidence assessed by lead inspector.
- If response judged OK, inspection closed out.
- Final inspection report sent to company
- ▶ If response <u>not</u> OK, refer to Independent Committee for appropriate action.

Typical PIC/S inspection of a medicinal product manufacturer

PIC/S inspection report

- Identical to the EU Inspection Report format
- SOP for PIC/S Inspection Report format is available on PIC/S web site (document PI 013-3)
- This format used by PIC/S and EU Inspectorates to prepare GMP inspection reports
- Uniform system of classifying GMP deficiencies
 - "critical", "major" & "other"



Moving forwards

PIC/S Blueprint adopted by PIC/S Committee in December 2005

Aim:

- To review PIC/S' mission & goals in a changing environment.
- To set a number of objectives and actions for the next 10 years.
- To raise PIC/S' visibility and explain the benefits of PIC/S membership.
- To make PIC/S more of a global organisation rather than European focused.

(PIC/S Blueprint is available at www.picscheme.org)



Moving forwards

Recent developments

- Participation in European Commission's initiative for enhanced international co-operation in the field of APIs;
- Application of New Zealand / Medsafe, Taiwan / FDA, UK / Vet and Brazil / ANVISA;
- MoU signed with Russia / Roszdravnadzor;
- Follow-up visit to US FDA (August 2010);
- Adoption of Technical Interpretation on Annex 1;
- Accession of Lithuania / SMCA as 37th Participating Authority



Moving forwards

Recent developments

- Preparation of the 40th anniversary of PIC-PIC/S in May 2011,
- Facing new challenges as increasing the number of participants versus available resources,
- Better work-sharing of tasks (e.g. training of inspectors) with other organisations as WHO,
- Acting proactively with certain key agencies



PIC/S Contacts

Composition of the Executive Bureau

- Mr. Tor Gråberg (Chairman),
- Ms. Helena Baião (1st Deputy Chairperson),
- Dr. Joey Gouws (2nd Deputy Chairperson),
- Mr. Paul Hargreaves,
- Dr. Vassiliki Revithi,
- Mr. Boon Meow Hoe,
- Mr. Jirí Holy,
- Mr. Jacques Morénas (past Chairman)



PIC/S Contacts

PIC/S Secretariat 14 rue du Roveray CH - 1207 GENEVA

Tel: +41.22 738 92 16

Fax: +41.22 738 92 17

Email: <u>info@picscheme.org</u>

Web site: <u>www.picscheme.org</u>

www.picscheme.org





#