

*Pharmaceutical
Inspection
Co-operation
Scheme (PIC/S)*



*2015 PDA-PIC/S
Training Course on GMPs for APIs
September 14-15 - Hyderabad, India
September 17-18 - Ahmedabad, India*

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*Bom dia
Good Morning*



Overview

- ❑ About **PIC/S Role & Goals**
- ❑ **PIC/S Quality Systems & Guides & Recommendations**
- ❑ **Pre-Accession + Accession procedure**
- ❑ **Quality System** requirements for Pharmaceuticals Inspectorates
- ❑ **Harmonization & Good Inspection Practices & GM(D)P**
- ❑ **PIC/S Recent developments**
- ❑ **PIC/S Future & Philosophy & Final Remarks**
- ❑ Acknowledgement

PIC/S Mission



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

History

PIC = Pharmaceutical Inspection Convention

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

History

PIC	Pharmaceutical Inspection Convention
PIC Scheme	Pharmaceutical Inspection Cooperation Scheme

Both operate in parallel under the logo/abbreviation



PIC versus PIC/S

PIC

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

PIC/S

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

Original Goals

- ✓ **Harmonised GMP requirements (*)**
- ✓ **Mutual recognition** of inspections
- ✓ **Uniform** inspection systems
- ✓ **Training** of Inspectors
- ✓ **Mutual confidence (Trust)**

(*) The difference is not so much in different GMP standards being used around the world but in the interpretation of standards

Reason 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.



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”**

Achievement of PIC/S Goals

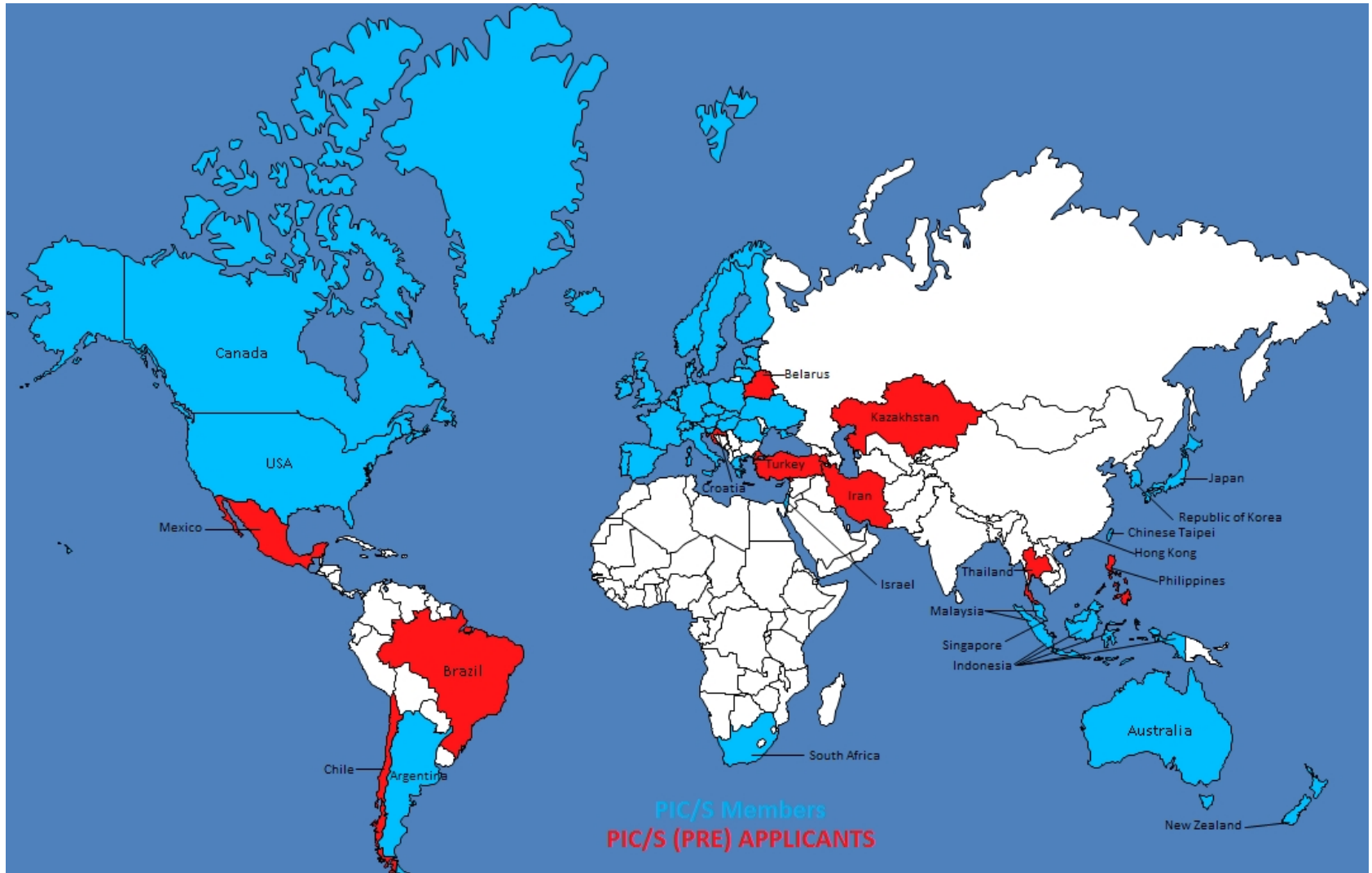
PIC/S goals to be achieved by:

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

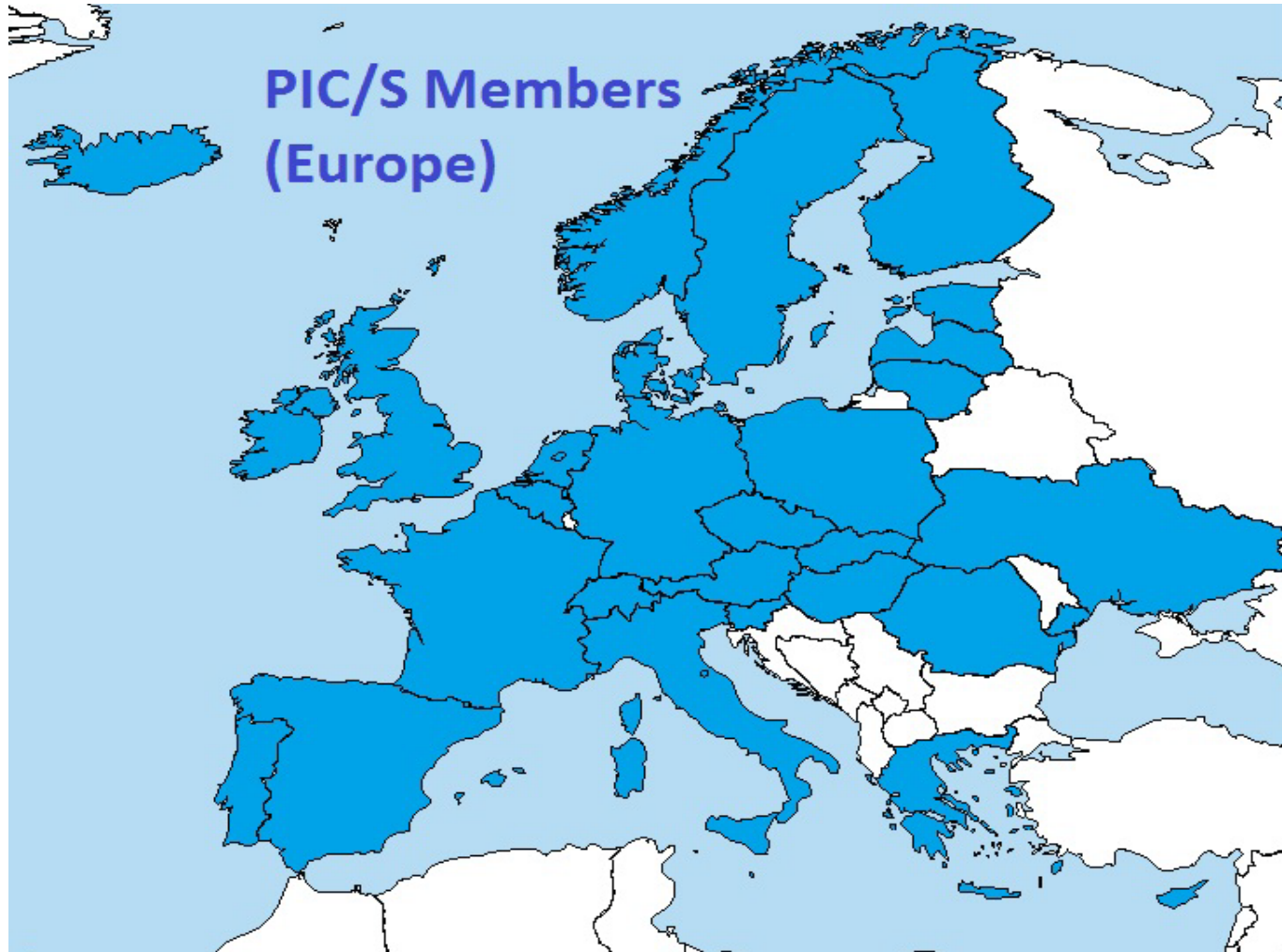
47 PIC/S Members (as of 1 January 2016)



10 PIC/S Applicants & Pre-Applicants



PIC/S Members (Europe)



PIC/S Members
(Europe)

- AUSTRIA
- BELGIUM
- CZECH REP. (Human & Vet)
- CYPRUS
- DENMARK
- ESTONIA
- FINLAND
- FRANCE (Human & Vet)
- GERMANY
- GREECE
- HUNGARY
- ICELAND
- IRELAND
- ITALY
- LATVIA
- LIECHTENSTEIN
- LITHUANIA
- MALTA
- NETHERLANDS
- NORWAY
- POLAND
- PORTUGAL
- ROMANIA
- SLOVAK REPUBLIC
- SLOVENIA
- SPAIN
- SWEDEN
- SWITZERLAND
- UKRAINE
- UNITED KINGDOM (Human & Vet)



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

Quality system requirements for pharmaceuticals inspectorates

based on proper inspection standards

Reference document : **PI 002-3**

Purpose : adopt a common standard for **quality system requirements** in order to achieve **consistency in inspection standards** between National Pharmaceutical Inspectorates and thus to **facilitate the equivalence of Inspectorates**

Quality system requirements for pharmaceuticals inspectorates

Reference document : **PI 002-3**

- based on various ISO standards:
 - ISO 17020, ISO 17021, ISO 9001, ISO 19011 etc.
- Some inspectorates are accredited or certified, others are not
- **ISO Certification or Accreditation is NOT mandatory.**

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 pharmaceutical 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
- ❑ Publications

How PIC/S operates

- PIC/S Committee
- Secretariat
- Executive Bureau: Chair, Deputy Chair, past Chair, seven Chairs of Sub-Committees
- Small Budget
- Good relationship and co-operation
- Training opportunities
- Exchange of information, rapid alerts
- Development of GMP guidelines

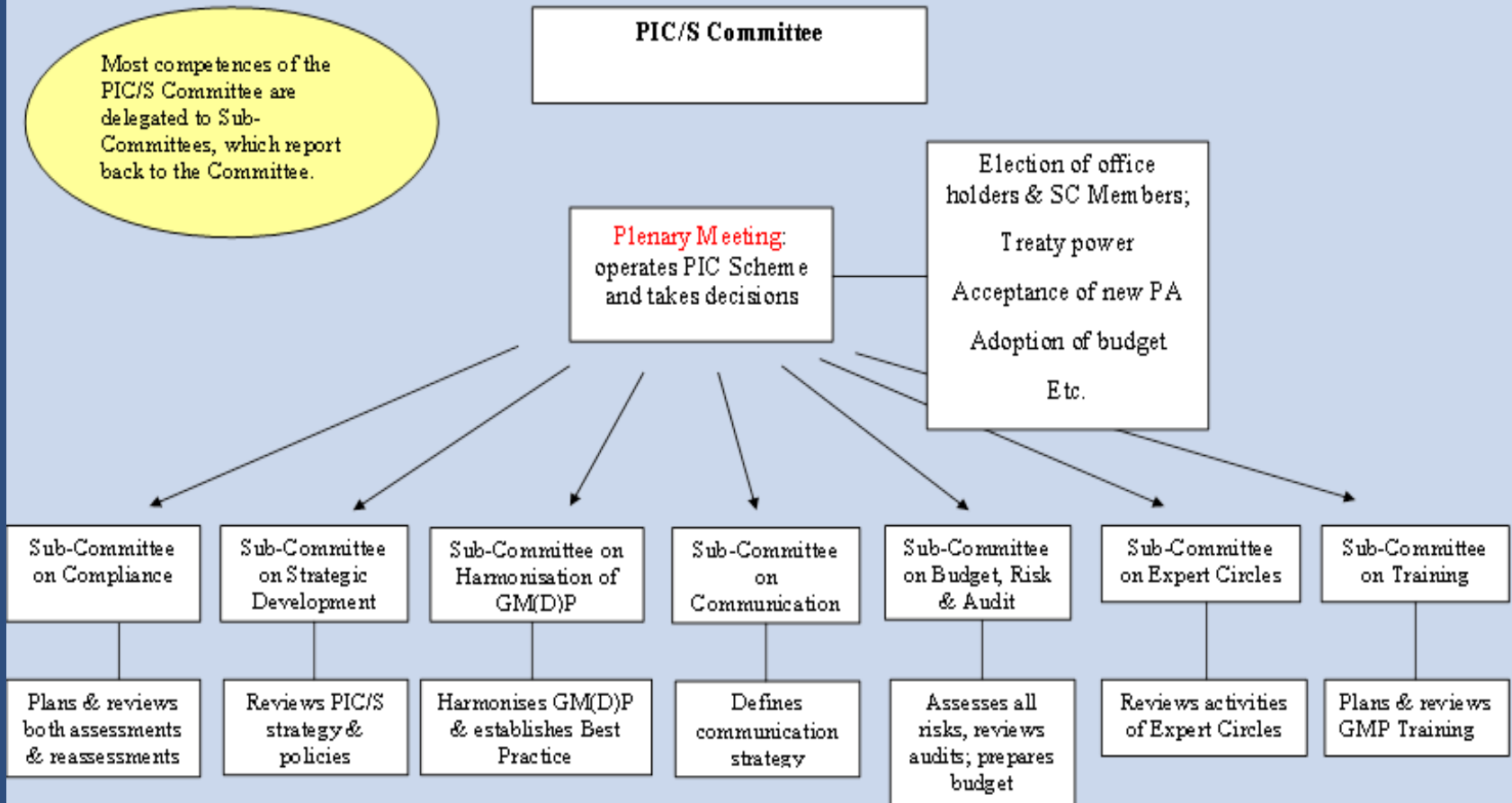


New PIC/S Organisational Sub-Committee Structure

To reply to PIC/S's growing membership, a new Sub-Committee structure has been developed and come in force 1st January 2014, in order to:

- Favour the participation of all PIC/S Participating Authorities
- Establish a more participative and efficient organisation of PIC/S, where each Sub-Committee will be responsible for its respective core areas and will take the lead in developing policies.

PIC/S new structure as of 1 January 2014



Accession dates (1)

Accession to PIC

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
Netherlands	-
Czech Republic	-
Slovak Republic	-

Accession to PIC/S

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
Nov 1995
Jan 1997
Jan 1997



Accessions dates (2)

Accession to PIC

Accession to PIC/S

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
USA	-	Jan 2011
Ukraine	-	Jan 2011
Slovenia	-	Jan 2012
Indonesia	-	Jul 2012

Accessions dates (3)

Accession to PIC

New Zealand	-
Chinese Taipei	-
United Kingdom (Vet)	-
Japan	-
Korea (Republic of)	-
Hong Kong SAR	-

Accession to PIC/S

Jan 2013
Jan 2013
Jan 2014
Jul 2014
Jul 2014
Jan 2016

Current situation of candidates to PIC/S July 2015

Applicants

Up to 6 years

1. **Brazil**
2. **Philippines**
3. **Iran**
4. **Turkey**
5. **Croatia**
6. **Mexico**
7. **Thailand**

Pre – Applicants

Up to 2 years

1. **Armenia***
2. **Belarus**
3. **Uganda***
4. **Kazakhstan**
5. **Chile**

*pre-accession application complete

Interested to apply

1. **Nigeria**
2. **China CFDA**
3. **Bulgaria**
4. **Hungary (vet)**
5. **Saudi Arabia**
6. **Russia**
7. **Bhutan**

Europe

Asia

Africa

America

Why should an Agency apply to PIC/S?

- To strengthen the GMP Inspectorate and regulatory standards.
- To participate in the development of new and improved ways to inspect the industry.
- To improve its own quality system through the assessment and re-assessment procedure
- To cooperate and find common solutions in the GMPs along with more than **46** authorities in 5 continents
- **Because we are not alone on this planet!**

Pre-accession + Accession procedure

Useful Documents

- **Pharmaceutical Inspection Cooperation Scheme (PIC/S 1/95)**
- Guidelines for Accession to PIC/S (**PS/W 14/2011**)
- Questionnaire for Competent Authorities (**PS/W 1/2011**)
- Audit Checklist (**PS/W 1/2005**)
- **Recommendations on quality system requirements pharmaceutical inspectorates (PI 002-3)**



1. Pre-accession procedure

- As some of the new applicants may have notable differences or are not familiar to PIC/S standards, a new “period” offers a “softer” approach and more time to adjust.
- It is a kind of pre-assessment and gap analysis of the Applicant Authority to the PIC/S requirements and a possible on site visit of an “auditor” appointed by the Committee
- Time frame up to 2 years
- Then, time to decide for the application. Is the Applicant ready? The Committee will decide on the next steps (invitation to apply or further delay to prepare)

2. Accession procedure

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.

Obligations as a PIC/S Member

PIC/S Member's active participation and contribution is the only way forward

- (1) Payment of annual membership fee
- (2) To attend PIC/S Committee Meetings – twice a year – one in Geneva and the other one in a member country (together with the annual seminar)
- (3) To host or participate in the annual PIC/S Seminar**
- (4) To host or participate in PIC/S Expert Circles & JVP & JRP**
- (5) To participate in PIC/S Sub-Committees (SC).**

PIC/S Guides & Recommendations

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

The PIC/S GMP Guide – PE 009-11

(latest revision entered into force on 1st March 2014)

PIC/S GMP Guide (2)

Plus Annexes, covering:

- 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

PIC/S Guides & Recommendations

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 EMA (& 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 and PIC/S as Annex 15
- Jointly revised with the EU (published April 2015 with entry into force in October 2015)



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

PIC/S Guides & Recommendations

- ✓ **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**
- ✓ **Validation of Computerised Systems**
- ➔ **PIC/S Aide –Memoire ON ASSESSMENT OF QRM IMPLEMENTATION PI 038-1**
- ➔ **PIC/S RECOMMENDATION ON RISK-BASED INSPECTION PLANNING PI 037-1**

PIC/S Training for GMP Inspectors

- ✓ Annual Training Seminars
- ✓ Training Courses for New Inspectors
- ✓ Expert Circles
- ✓ Joint Visits Programme (JVP) and Coached Inspections Programme (CIP)
- ✓ **PIC/S - Industry Workshops**





PIC/S Seminars (1)

- 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?)
 - Tablet Manufacture
 - Manufacture of Active Ingredients
- Switzerland, 1971
Sweden, 1972
France, 1972
UK, 1973
Switzerland, 1974
Denmark, 1975
Austria, 1976
Sweden, 1977
UK, 1978
Norway, 1978
- Finland, 1979
Denmark, 1980
Switzerland, 1980



PIC/S Seminars (2)

- Control Laboratory Hungary, 1981
- Validation Ireland, 1982
- Packaging Portugal, 1983
- Production of Biological Products Germany, 1984
- Premises Norway, 1985
- Plastics Sweden, 1986
- Inspection UK, 1987
- Water Switzerland, 1988
- Contamination Risk in the Manufacture of Parenterals Austria, 1989
- Blood & Blood Products Denmark, 1990
- Audit - Pharmaceutical Inspection Hungary, 1991
- Products Derived from Biotechnology Italy, 1992



PIC/S Seminars (3)

- Inspection & Testing in Relation to the Marketing Authorisation
 - Qualification & Validation
 - Manufacture of Sterile Products
 - Computer Systems
 - GMP Standards for APIs
 - Manufacture & Inspection of APIs
 - Quality Systems for Inspectorates
 - Non-technical Aspects of Inspection
 - Biotechnology
 - Inspection of Utilities
 - Interface between GCP and GMP
- Belgium, 1993
Ireland, 1994
Iceland, 1995
Australia, 1996
Australia, 1996
Finland, 1997
Holland, 1998
UK, 1999
France, 2000
Czech Rep, 2001
Canada, 2002



PIC/S Seminars (4)

- 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
 - Herbal / Traditional Medicines
 - Good Inspection Practices
 - Qualification and Validation
 - Global Supply Chains and GMP Compliance
 - Dedicated Facilities or Not
- Slovak Rep, 2003
Spain, 2004
- Romania, 2005
Germany, 2006
Singapore, 2007
Poland, 2008
Sweden, 2009
Malaysia, 2010
South Africa, 2011
Ukraine, 2012
Canada, 2013
France, 2014

Biopharmaceuticals (biotechnology and biologicals): how to inspect

Indonesia, 2015

Expert Circles



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

Aim: Develop draft guidance documents
Training in specialised field

Working Groups

- ✓ Revision of Annex 1 (joint WG with EU)
- ✓ ATMPs
- ✓ Harmonisation of Classification of Deficiencies
- ✓ GCP & GVP
- ✓ Data Integrity
- ✓ Veterinary Medicinal Products
- ✓ Controlling Cross-Contamination in Shared Facilities

PIC/S Joint Visits

Idea was highlighted already in 1974 and **started in 1987** with a trial phase

- Around **19** groups of 3 inspectors from 3 countries
- 3 inspections (one per country) to be completed ideally within 18 months
- ❖ **for training purposes**
- ❖ **for uniform GMP interpretation**
- ❖ **for uniform inspection procedures**
- ❖ **for mutual confidence**



- The current groups are inspecting **Gas (1), Vet (1), GMP (2), Sterile GMP (3), APIs (1), GDP (1), GCP (5) and GVP (5)**



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**

Harmonization of Good Inspection Practices and GM(D)P Practices & Standards

Through encouraging risk-based inspections and introducing a QRM tool for inspectorates; can be used for other activities such as e.g. “the audit of suppliers” (services)

Through a PIC/S aide-memoire for API inspections in order to harmonize practices & interpretation & approach

Through developing an International API Training Programme to harmonize interpretation and application

Through a notification procedure for quality defects and falsification for PIC/S members

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”
- **Working Group created to harmonize interpretation & classification of deficiencies**

Typical PIC/S Inspection of a Medicine 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 Medicine Manufacturer (cont'd)

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 not OK, refer to Independent Committee for appropriate action.

PIC/S activities in 2015

Date	Place	Activity	Organised by
22-23 January	Seoul (KR)	PIC/S - PDA ICH API (Q7) Training	PIC/S and PDA in co-operation with MFDS
10-12 February	Brasilia (BR)	PIC/S - PDA ICH API (Q7) Training	PIC/S and PDA in co-operation with ANVISA
23-26 March	Taipei (TW)	PIC/S Expert Circle on Good Distribution Practices (GDP)	TFDA (Chinese Taipei)
11 May (morning)	Geneva (CH)	PIC/S Executive Bureau: Preparatory Meeting	PIC/S Secretariat
11-12 May	Geneva (CH)	PIC/S Committee (starting at 2 pm on the first day)	PIC/S Secretariat
13 May	Geneva (CH)	PIC/S Executive Bureau - China / CFDA bilateral meeting	PIC/S Secretariat
14-15 September	Hyderabad (IN)	PIC/S - PDA ICH API (Q7) Training	PIC/S and PDA in co-operation with DIA
17-18 September	Ahmedabad (IN)	PIC/S - PDA ICH API (Q7) Training	PIC/S and PDA in co-operation with DIA
5 October	Nusa Dua (ID)	PIC/S Executive Bureau: Preparatory Meeting	PIC/S Secretariat
5-6 October	Nusa Dua (ID)	PIC/S Committee (starting at 2 pm on the first day)	PIC/S Secretariat
7-9 October	Nusa Dua (ID)	PIC/S Seminar on "Biopharmaceuticals (Biologicals and Biotech): How to inspect"	NADFC (Indonesia)
5-7 October	Los Angeles (US)	PIC/S Advanced QRM Training Course	US FDA
20-22 October	Strasbourg (FR)	PIC/S Expert Circle on APIs and Advanced Training on APIs	EDQM
26-30 October	Rome (IT)	PIC/S Expert Circle on Blood, Tissue and Cells	AIFA (Italy)

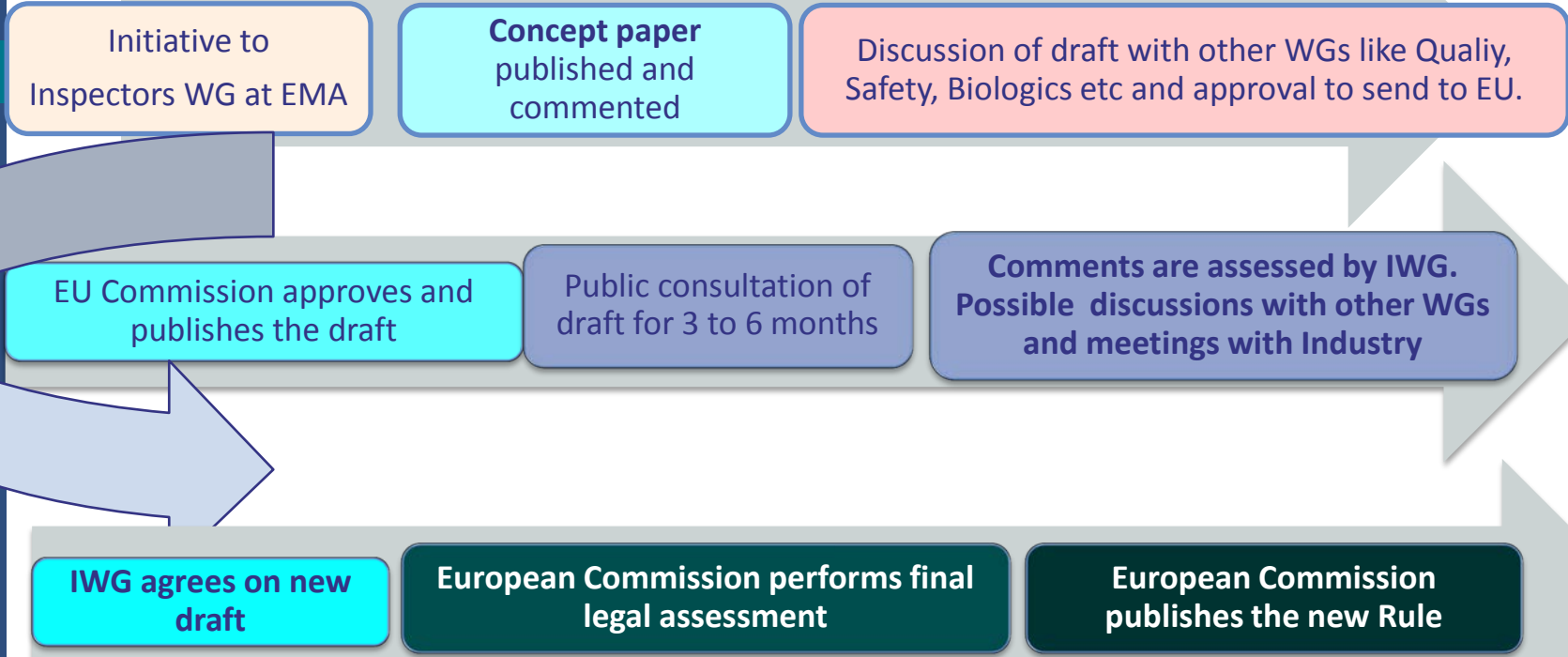
Relationship with EMA

(European Medicine Agency, EMA)

- EMA attends PIC/S Committee as a Associated Partner organisation
- **PIC/S-EU liaison officer attends Inspectors meetings at EMA as an observer**
- **A Harmonised Consultation Procedure**
- Associated Partnership negotiated in 2007 (renewed in 2010)

Revision Procedure in EU and PIC/S Effort for parallel paths

EU



Comparing GMPs & GDPs in EU/EEA and PIC/S



GMPs in EU

3 Parts and 19 Annexes

PART I Basic Requirements for
MPs

PART II Basic Requirements for
APIs

PART III GMP related guidance
& 19 Annexes of GMPs (18 is blank)

& GDPs in EU

GMPs in PIC/S

(PE 009-11):

PART I Basic Requirements for MPs

PART II Basic Requirements for APIs

No Part III

19 Annexes of GMPs (16 and 18 blank)

& GDPs in PIC/S

Liaison with other organisations

- ✓ The European Department for the Quality of Medicines (EDQM): Associated Partnership negotiated in 2007 (renewed in 2013),
- ✓ UNICEF: Associated Partnership negotiated in 2008,
- ✓ WHO: Co-operation Arrangement negotiated in May 2009
- ✓ ICH
- ✓ European Commission (DG Health & Consumers)
- ✓ ASEAN
- ✓ ICMRA

PIC/S membership and positive impact for industry

Manufacturers are increasingly worried by the multiplication and duplication of inspections:

- ❖ which means not only more fees but also more staff immobilized;
- ❖ possibly a lower-than-usual production output during these inspections.

Industry is generally favorable to PIC/S' expansion



PIC/S membership and positive impact for industry

It is **essential for PIC/S** to maintain good relations with industry as the manufacturer being at the heart of the GMP process

Reduced duplication of inspections (*cost savings*)

Export facilitation (*including to non-PIC/S countries*)

Enhanced market access

Reputation of industry enhanced

Transparent inspection standards

Consistency of inspections

Reliable quality of medicines available locally and internationally



PIC/S membership

Challenges Facing Regulators/Inspectors

Regulating Products derived from Newer Technologies, e.g.:

1. Nanomedicines from Nanotechnology;
2. Biopharmaceuticals from Biotechnology
3. Cell-Based Products from Tissue Engineering

Migrating from Quality by Testing (QbT) to Quality by Design (QbD)

Assuring API Quality & Supply Chain Integrity





PIC/S membership

Challenges Facing Regulators/Inspectors

Assuring Supply Chain Integrity

Many players in supply chain from manufacture of API to distribution of finished products to point of use

Increased number of players in API/product supply chain

Many potential points for interference of API/product

GMP/GDP Compliance can help :

Assure Quality of API/Finished Products - Manipulation by Unscrupulous Supply Chain Players - Detect Adulterated Products, Counterfeits & Falsified Medicines

International Efforts to Protect Supply Chain

PIC/S membership

Challenges Facing Regulators/Inspectors

International Efforts on Supply Chain Integrity

Global Harmonization of GMP Standards for API by ICH, PIC/S & WHO
Specific International Collaborative Initiatives

PIC/S Expert Circle on API (PIC/S API International Training Programme)

Harmonization/Training of Inspectors *Exchange Reports & Avoid Duplication of Inspections*

- Q7 Training for Inspectors and Industry;
- Advanced API Training for Inspectors only;
- Q & A on API .

WHO PQP on Essential Medicines including APIs - Assist Developing Countries in Procurement of APIs/Finished Products

International efforts going on, but more can be done:

Benefiting Patients, Consumers & Public, Globally



PIC/S Membership and Impact at Regional Level



Regional Institutions have become increasingly important as they are actively involved **in the field of GMP whether in terms of:**

- **Harmonization;**
- **Standards;**
- **Training.**

Co-operation, network and support are important to reduce the risk of unnecessary duplications and build confidence.

Benefits for all parties

PIC/S membership provides benefits not only to the **applicant regulatory authority**, but also to the medicine **manufacturing industry** and of course to the **consumers / patients** of the country involved.

ALL will benefit by a proper Foreign Inspections cooperation and ALL will save resources.

PIC/S Blueprint

➤ **PIC/S Blueprint** PS/W 8/2005

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 focussed.

✓ PIC/S Blueprint is available at www.picscheme.org

PIC/S Blueprint

- ✓ **Most objectives have been or will be achieved in set time frame**
- ✓ **e.g. regarding the target of integrating 12 new Agencies by 2015**
- ✓ **e.g. opening up PIC/S to GDP and GXP**

Recent Developments

- Accession of Hong Kong SAR's PPBHK (as of January 2016)
- Revision of PIC/S GMP Guide (Annex 15) (enter into force on 1 October 2015)
- Establishment of PIC/S Inspectors' Academy (PIA) (October 2014)
- Accession of Japan's MHLW, PMDA & Prefectures and of Korea's MFDS (July 2014)
- New PIC/S GDP Guide, based on EU GDP Guide (June 2014)
- Revision of PIC/S GMP Guide (Part II of GMP Guide (Q7A), Annex 2 and 14) (March 2014)
- Revision of PIC/S Guide to Good Practices for the Preparation of Medicinal Products in Healthcare Establishments (new Annex 3 on radiopharmaceuticals) (March 2014)
- New PIC/S Organisational Sub-Committee Structure (Jan 2014)

Final Remarks

Conclusions

Increased emphasis on focused issues such as counterfeiting & pandemic & medicines shortage

Requires the use of :

- ❖ science-based policies and standards
- ❖ risk-based orientation
- ❖ *integrated quality systems orientation*
- ❖ international cooperation

To grant public health protection

Final Remarks

Conclusions



“PIC/S is continuously exploring ways **to facilitate the harmonization of GM(D)P and to adapt** to a beautiful but constantly changing world”

Reason for PIC/S’ success: mandate & mission still valid today
Increasingly becoming and acting as a “global player”

Future of PIC/S & New Projects

- ✓ **Expansion** to cover Good Distribution Practices - GDP (new Expert Circle established); Good Clinical Practices - GCP and Good Pharmacovigilance Practices - GVP (new Working Group);
- ✓ **PIC/S Inspectorates Academy**



PIC/S Executive Bureau

- **Joey Gouws (South Africa / MCC), PIC/S Chairperson;**
- **Paul Hargreaves (UK / MHRA),** PIC/S Deputy Chairman and Chair of the Sub-Committee on Budget, Risk and Audit (SCB);
- **Helena Baião (Portugal / INFARMED IP),** immediate former Chairperson;
- **Boon Meow Hoe (Singapore / HSA),** Chair of the Sub-Committee on Training (SCT);
- **Andreas Krassnigg (Austria / AGES),** Chair of the Sub-Committee on Expert Circles (SCEC);
- **Jacques Morénas (France / ANSM),** Chair of the Sub-Committee on Strategic Development (SCSD);
- **Anne Hayes (Ireland / HPRA),** Chair of the Sub-Committee on Compliance (SCC);
- **Paul Gustafson (Canada / HPFBI),** Chair of the Sub-Committee on GM(D)P Harmonisation (SCH);
- **Tor Gråberg (Sweden / MPA),** Chair of the Sub-Committee on Communication (SC COM).

Browser window showing the URL <http://www.picscheme.org/>. The address bar includes the PIC/S logo and a search icon. The browser toolbar shows various icons including a search bar, a 'Go' button, and several utility icons like 'Find Software', 'YouTube', 'Email Notifier', and 'Disabled'. The Norton Safe Web and Identity Safe status bars are visible at the bottom of the browser window.

Website header featuring the PIC/S logo and the text "Pharmaceutical Inspection Co-operation Scheme". A search bar is located in the top right corner, along with links for "Contact", "Site Map", and "Members Area". A "Members area" login box is present, containing fields for "Username" and a password field, with an "Enter" button. Below the login box, a message states: "This area is reserved to PIC/S Members only". The last update date is noted as "07 December 2011". A navigation menu at the bottom includes links for "PIC/S", "Role", "Benefits", "Members & Partners", "Activities", "Training", "Publications", "Accession", "Links", and "News".

Welcome to the PIC/S Website!

The Pharmaceutical Inspection Convention and Pharmaceutical Inspection Co-operation Scheme (jointly referred to as PIC/S) are two international instruments between countries and pharmaceutical inspection authorities, which provide together an active and constructive co-operation in the field of GMP.

PIC/S' mission is "to lead the international development, implementation and maintenance of harmonised Good Manufacturing Practice (GMP) standards and quality systems of inspectorates in the field of medicinal products."

This is to be achieved by developing and promoting harmonised GMP standards and guidance documents; training competent authorities, in particular inspectors; assessing (and reassessing)

Training



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Expert Circle on Computerised Systems [Read more](#)

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- [Q&A Documents](#)
- [PIC/S GMP Guide](#)
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Most PIC/S publications can be downloaded for free

News

REVISED PIC/S SCHEME ENTERED INTO FORCE ON 1 JANUARY 2012
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PIC/S EVENTS IN CAPE TOWN, SOUTH AFRICA, 6-11 NOVEMBER 2011
>Read more

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*The protection of public health and
of the patient is our common goal*

Thanks for your attention

