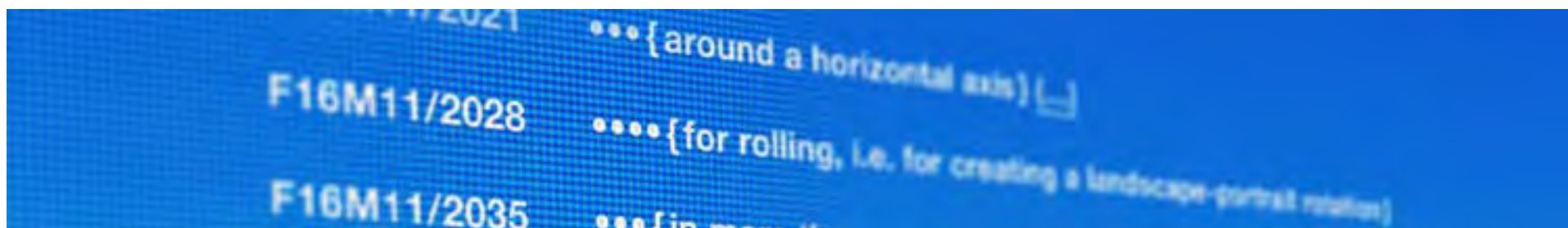


# 3<sup>rd</sup> EPO-USPTO CPC Annual Meeting with industry users



Vienna, 16 March 2016



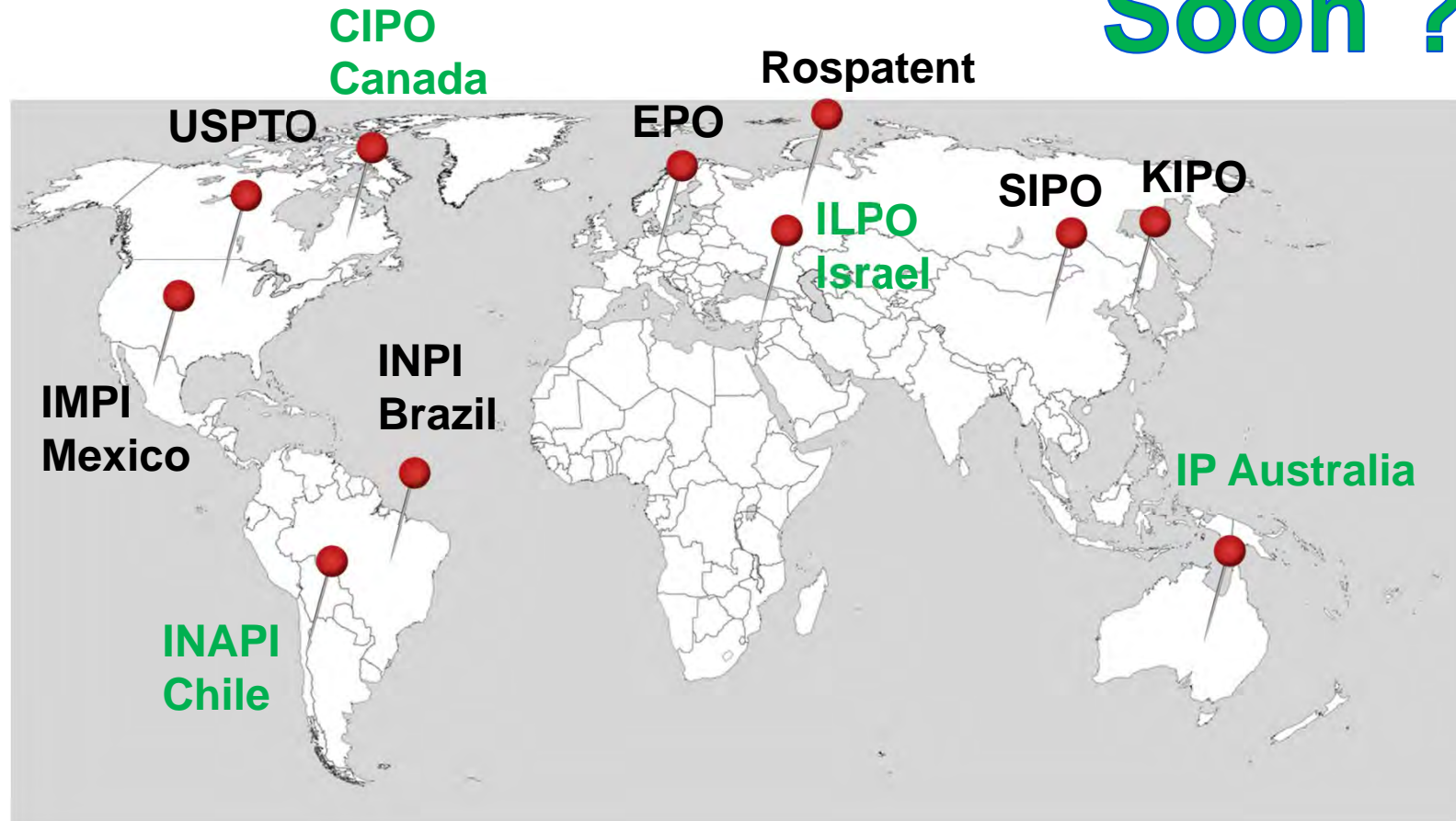
# Agenda

- Which are the offices participating in the CPC?
- CPC coverage – Much more than EP & US documents...
- CPC scheme and releases
- New scheme related services
- IT matters
- Future developments
  - Training
  - CPC Quality measures
  - Statistics on the usage of [www.cpcinfo.org](http://www.cpcinfo.org)

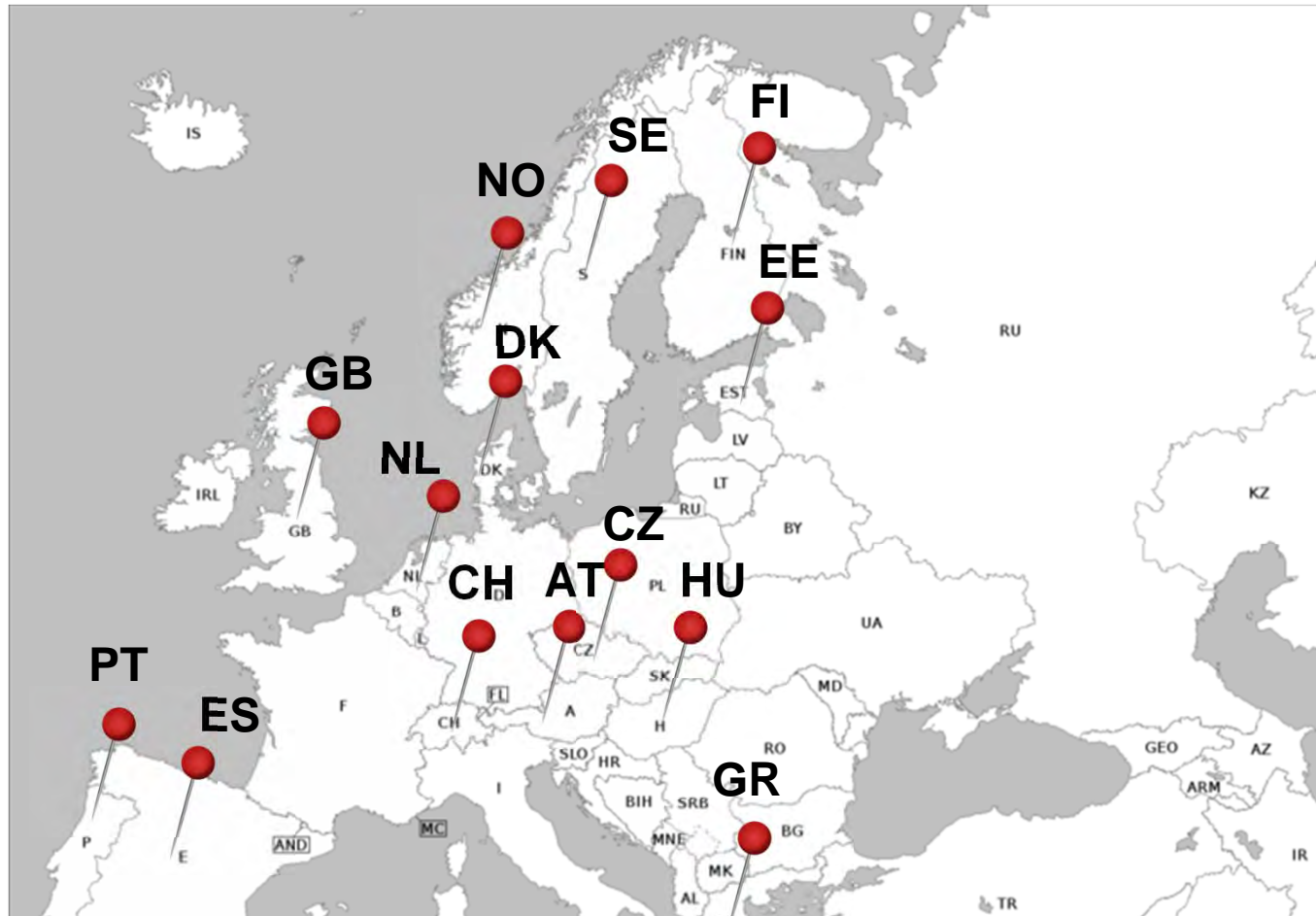
**Which are the offices participating in  
the CPC?**

## Around the world

Soon ?



## Within the European Patent Organisation



Furthermore, CPC is **used for search** by more than **45 Patent Offices** and by more than **25 000 examiners**

## CPC implementation at National Offices

Three major activities (see details later):

- **Training**
- **Quality Measures**
- **IT support**, e.g. for CPC data exchange

**CPC coverage – Much more than EP & US documents...**

## CPC-Classified Documentation

- **US, CH, DE, FR, GB, EP**
- **AP** (ARIPO), **OA** (OAPI) & All **WO** (WIPO)
- **BE, NL, LU** (historical reasons)
- **AT, AU, CA** (first filing residents)



# CPC documentation coverage

Country	CC	Code	Systematically classified**	Non-systematically classified
<b>ARIPO</b>	<b>AP</b>		complete from 1 (3/7/1985)	
<b>Austria</b>	<b>AT*</b>	<b>A,B</b>	from 288 286 (15/1/1971)	from 100 022 (1925)
<b>Australia</b>	<b>AU*</b>	<b>B,D</b>	from 18/1/1973 (first filing: 1971)	from 1 019 332 (1933)
<b>Belgium</b>	<b>BE</b>		from 100 486 (1892)	years 1959-1962
<b>Canada</b>	<b>CA*</b>		from 848 159 (4/8/1970) for first filling residents from 939 101 (1/1/1974)	from 114 746 (1908)
<b>Switzerland</b>	<b>CH</b>	<b>A,B D</b>	from 208 320 (31/1/1939) from 1968	from 1 (1888)
<b>Germany</b>	<b>DE</b>	<b>A,B,C U</b>	from 1 (1877) from 6 609 798 (04/1/1973)	from 1 037 492 (1928)
<b>EPO</b>	<b>EP</b>	<b>A</b>	complete from 1 (20/12/1978)	
<b>France</b>	<b>FR</b>	<b>A,B E</b>	from 292 (1844) from 92 701 (20/12/1968)	
<b>United Kingdom</b>	<b>GB</b>	<b>A,B</b>	from 1909 02 488 (27/1/1910)	from 1817 04 136 (1817)
<b>Luxembourg</b>	<b>LU</b>		from 555 (<1920)	
<b>The Netherlands</b>	<b>NL</b>		from 28 (1913)	
<b>OAPI</b>	<b>OA</b>		complete from 1 (15/01/1966)	
<b>The United States</b>	<b>US</b>	<b>A,B E I (defensive) I (trial, project) H</b>	complete from 1 (13/07/1836) complete from 8 (23/4/1839) complete from 120 (04/10/1855) complete from 1 (03/12/1985)	
<b>World(PCT)</b>	<b>WO</b>		complete from 7800001 (19/10/1978)	

\* for first filings only ie. without foreign priorities

\*\* when the indication "complete" is not present, this means that some documents in the collection may not be classified in CPC

## CPC Coverage – Update 18 January 2016

Country	Country Code	Number of documents *	Number of publications classified in CPC (family or document level)	% publications classified in CPC (family or document level)
<b>EPO</b>	<b>EP</b>	<b>2,960,410</b>	<b>2,953,408</b>	<b>99.8</b>
<b>United States</b>	<b>US</b>	<b>11,561,111</b>	<b>11,239,893</b>	<b>97.2</b>
<b>ARIPO</b>	<b>AP</b>	<b>3,465</b>	<b>3,263</b>	<b>94.2</b>
<b>Austria</b>	<b>AT</b>	<b>1,001,650</b>	<b>644,880</b>	<b>64.4</b>
<b>Australia</b>	<b>AU</b>	<b>1,479,433</b>	<b>1,333,186</b>	<b>90.1</b>
<b>Belgium</b>	<b>BE</b>	<b>585,582</b>	<b>551,528</b>	<b>94.2</b>
<b>Canada</b>	<b>CA</b>	<b>2,314,139</b>	<b>1,233,373</b>	<b>53.3</b>
<b>Switzerland</b>	<b>CH</b>	<b>713,889</b>	<b>574,737</b>	<b>80.5</b>
<b>Germany</b>	<b>DE</b>	<b>5,471,072</b>	<b>4,665,281</b>	<b>85.3</b>
<b>France</b>	<b>FR</b>	<b>2,400,075</b>	<b>2,379,438</b>	<b>99.1</b>
<b>Great Britain</b>	<b>GB</b>	<b>2,361,704</b>	<b>2,104,831</b>	<b>89.1</b>
<b>Luxemburg</b>	<b>LU</b>	<b>61,575</b>	<b>60,538</b>	<b>98.3</b>
<b>Netherlands</b>	<b>NL</b>	<b>548,340</b>	<b>536,372</b>	<b>97.8</b>
<b>OAPI</b>	<b>OA</b>	<b>13,432</b>	<b>13,190</b>	<b>98.2</b>
<b>WIPO</b>	<b>WO</b>	<b>2,776,852</b>	<b>2,768,484</b>	<b>99.7</b>

**44.3 million documents classified in CPC**

## CPCNO data delivered by National Offices - Update 14 March 2016

Country	Country Code	Number of publications with CPCNO allocations (document level)
Austria	AT	4,530
Brazil	BR	4,300
China	CN	160,000
Finland	FI	4,600
Great Britain	GB	116,500
Greece	GR	5,000
Korea	KR	178,000
Spain	ES	29,900
Sweden	SE	138,500

## Plan of delivery of CPC Data from KIPO

Year	Backfile documents to be classified in CPC	Frontfile applications to be classified in CPC
2015	232.000	All
2016	457.000	All
2017	390.000	All
2018	390.000	All
From 2019	N/A	All

more than 1.000.000 KR documents are already classified in CPC  
KIPO will classify in CPC the last 10 years of backfile by 2018 (~1,3M docs)

## CPC classification work at SIPO

	Year	Backfile documents to be classified in CPC	Frontfile applications (to be) classified in CPC
STATUS	2014	89 000	0
	2015	385 000	155 820
PLAN	2016	-	1 100 000
	2017	Depending on the availability of resources	All

# CPC Scheme and releases

## CPC Revisions

- **CPC Revisions** Projects (RP), **Maintenance** projects (MP) and **Definition** projects (DP) are bilaterally discussed in the CPC e-forum (CEF)
- CPC-NO offices have been granted **read access to the CEF** and can submit input or feedback via the email addresses:
  - [cpc@epo.org](mailto:cpc@epo.org)
  - [cpc@uspto.gov](mailto:cpc@uspto.gov)
- **Notices of Changes (NoCs)** are published one month before entry into force
  - published in the [www.cpcinfo.org](http://www.cpcinfo.org) site
    - section Revisions, Notices of Changes
      - NoC title linked to RP number and subclass
- 2015: in total NoC 50-148 (= 99 projects)

## CPC Revisions (cont'd)

- RP priorities are set by the Joint Board (JB), e.g.
  - NoC 44 =RP0015 B33Y Additive manufacturing
  - NoC 143=RP0229 Y02P Climate change mitigation technologies
- IPC2016.01 projects are being progressively introduced into CPC



## CPC-IPC alignment

CPC-IPC alignment is given high priority in the CPC revision process

- EPO & USPTO international obligations *vis-à-vis* the IPC
  - Publications must carry IPC symbols in force (Strasbourg Agreement)
  - “IPC reclassification” is actually a “CPC reclassification” at the EPO & USPTO
- CPC-to-IPC-concordance-list (CICL) needs prompt updates
  - CICL is used by offices to classify only in CPC and then roll-up to IPC
- Reduce (where possible) the “deviations” from the former IPC versions

## CPC-IPC alignment (cont'd)

- The CPC-IPC alignment can be pursued in **two ways**:
  - introduce IPC entries into CPC
  - promote CPC schemes into IPC (IP5 route)
- **Example1: IPC subclass A61P missing in CPC**
  - on USPTO initiative, A61P will be introduced into CPC
    - project RP0329
  - CPC A61P will be added, thereby eliminating one “deviation”
- **Example2: IPC main group H04N 15/00 missing in CPC**
  - on KIPO initiative, CPC schemes for “Stereoscopic and 3D TV systems” will be brought into IPC
    - project F044
  - IPC H04N 15/00 will be removed, thereby eliminating one “deviation”

## CPC-IPC alignment (cont'd)

Missing IPC	Section A	Section B	Section C	Section D	Section E	Section F	Section G	Section H	Totals
<b>Subclasses</b>	2	0	0	0	0	0	0	0	<b>2</b>
<b>Main Groups</b>	25	43	53	1	6	25	12	15	<b>180</b>
<b>Subgroups</b>	250	397	715	43	167	120	124	393	<b>2209</b>

- After introducing A61P into CPC, only 1 IPC subclass will be missing!
  - A01P
- Note that many main groups missing are just “residual ones” (99/00)
- It will be investigated how to further reduce the “deviations” at main group level, and then at subgroup level

# CPC Scheme Release

## 2013

- April 2013
- July 2013
- September 2013
- November 2013
- December 2013

## 2014

- February 2014
- June 2014
- July 2014
- September 2014
- October 2014
- November 2014

## 2015

- January 2015
- April 2015
- May 2015
- July 2015
- September 2015
- October 2015
- November 2015
- December 2015

## 2016

- January 2016
- February 2016
- **May 2016 (22 May!)**
- **August 2016**
- **November 2016**

## CPC releases from 2016 onwards

- Four times per year  
(+ one if needed)
  - announced on [www.cpcinfo.org](http://www.cpcinfo.org)
- CPC scheme release dates for 2016:
  - January
  - February (for introducing some IPC2016.01)
  - May
  - August
  - November

## CPC Scheme layout (CPC 2015.12)

Section A-H	Section Y
<p><u>Main Trunk</u></p> <p>About 162,000 symbols</p>	<ul style="list-style-type: none"> <li>• Tagging of emerging cross-sectional technologies <ul style="list-style-type: none"> <li>- Y02B    - Y04S</li> <li>- Y02C</li> <li>- Y02E</li> <li>- Y02T</li> <li>- Y02W</li> <li>- Y02P</li> </ul> </li> </ul>
<p><u>2000 series</u></p> <p>About 80,500 symbols</p>	<ul style="list-style-type: none"> <li>• United State Patent Classification (USPC) related <ul style="list-style-type: none"> <li>- Y10S</li> <li>- Y10T</li> </ul> </li> </ul> <p>About 17,600 symbols</p>

**About 260,000 entries in total in CPC system**

# New CPC Scheme related services

# Statistical mapping CPC to FI

<http://www.epo.org/searching-for-patents/helpful-resources/first-time-here/classification/cpc/cpc-fi.html>

Based on statistical analysis of allocations on documents

CPC	FI-1	FI-2	FI-3
<u>G01B1/00</u> (53)	G01B1/00 (11, 21%)		
<u>G01B11/00</u> (497)	G01B11/00,A (77, 15%)	G01B11/00,H (77, 15%)	G01B11/00,C (66, 13%)
<u>G01B11/002</u> (281)	G01B11/00,H (61, 22%)	G01B11/00,A (56, 20%)	
<u>G01B11/005</u> (64)	G01B11/24,A (11, 17%)	G01B11/00,A (9, 14%)	G01B11/00,G (9, 14%)
<u>G01B11/007</u> (62)	G01B21/00,P (18, 29%)	G01B11/00,A (17, 27%)	G01B5/012 (16, 26%)
<u>G01B11/02</u> (345)	G01B11/02,Z (131, 38%)		
<u>G01B11/022</u> (131)	G01B11/00,H (22, 17%)	G01B11/02,H (16, 12%)	G01B11/24,K (16, 12%)



# Statistical mapping FI to CPC

<http://www.epo.org/searching-for-patents/helpful-resources/first-time-here/classification/cpc/fi-cpc.html>

Based on statistical analysis of allocations on family members

FI	CPC-1	CPC-2	CPC-3
G01B11/00 (29)	G01B11/00 (11, 38%)		
G01B11/00&G (911)	<u>G03F9/7049</u> (127, 14%);	<u>G03F7/70775</u> (123, 14%);	<u>G01D5/38</u> (103, 11%)
G01B11/00&H (1890)	<u>G01B11/00</u> (77, 4%);	<u>G06T7/0075</u> (67, 4%);	<u>G06T7/0042</u> (67, 4%)
G01B11/00&Z (578)	<u>G01B11/00</u> (63, 11%)		
G01B11/02 (26)	<u>G01B11/02</u> (5, 19%);	<u>G01B11/024</u> (4, 15%)	
G01B11/02&G (107)	<u>G01B11/02</u> (12, 11%);	<u>G01N21/4788</u> (12, 11%);	<u>G03F7/70625</u> (12, 11%)
G01B11/02&H (368)	<u>G01B11/024</u> (25, 7%);	<u>G01B11/24</u> (23, 6%);	<u>G01B11/0608</u> (22, 6%)
G01B11/02&Z (685)	<u>G01B11/02</u> (131, 19%)		

# Recent developments

## CPC scheme – Y section

General tagging of new technological developments; general tagging of **cross-cutting technologies** spanning over several sections of the IPC

- **Y02**: Climate change mitigation technologies (CCMTs)
  - **Y02B** for Buildings
  - **Y02C** for Carbon Capture technologies
  - **Y02E** for Energy production and storage
  - **Y02T** for Transport
  - **Y02W** for Waste Water treatment/management
  - **Y02P** for Processes for energy-intensive industries (e.g. cement, metallurgy) (November 2015)
- **Y04**: Smart grids
  - **Y04S** for Power Network operation, communication or information technologies

## Intellectual Classification of WO publications in CPC by the EPO

- Since January 2016, **WO** documents in languages other than EPO official languages, e.g. in **Japanese, Korean, Chinese or Russian**, are not intellectually classified in CPC by the EPO anymore
  - IPC allocations provided by National Office are mapped to CPC symbols
  - Intellectual classification by the EPO still takes place for applications searched by the EPO, i.e. where family members are available in **English, German, French or Dutch**

## CPC scheme – Y section (Continue)

Technical subjects covered by former USPC cross-reference art collections [**XRACs**] and **Digests** and technical subjects from selected USPC

- **Y10S** for Apparel
- **Y10T** for Miscellaneous hardware, Metal working, Machine elements, cutting, single crystals, fluid handling, etc.

### **TEMPORARY** measure

Primary classification in main CPC area. Secondary (ADD) classification by USPTO only in these areas

- Y10T scheme available since January 2015

# IT matters

## OPS RESTful web services (classification)

These provide access to the EPO's raw data via a standardised XML interface.

The webservices focussing on classification relate to:

- CPC Search
- CPC Media retrieval
- CPC Retrieval

## CPC schema changes

- **Schema changes** for the CPC scheme and definitions are in preparation (not finalised yet).

### Impacted areas:

- References in Definitions
  - Enhanced references in Scheme and Definitions
  - Change in Synonyms and Keywords
- 
- Details will be made available on [www.cpcinfo.org](http://www.cpcinfo.org) in April/May 2016, to be effective as of the **November 2016** CPC release



# Future developments

## Combination sets & CPC data from National Offices

# C-Sets from National Offices in Espacenet

(<http://worldwide.espacenet.com>)

**Classification:**

- international: [C09J201/00](#); [C09J5/00](#); [C09J7/02](#); [H01L21/301](#)
- cooperative default: [C09J7/0207](#); [H01L21/6836](#); [H01L21/78](#); [H01L24/27](#); [H01L24/29](#); [H01L24/83](#); [C09J2201/36](#); [C09J2203/326](#); [H01L21/67132](#); [H01L2221/68318](#); [H01L2221/68327](#); [H01L2221/68336](#); [H01L2221/68359](#); [H01L2224/27436](#); [H01L2224/2919](#)

**CPCNO:** [C09J7/0207](#); [H01L21/6836](#); [H01L21/78](#); [H01L24/27](#); [H01L24/29](#); [H01L24/83](#); [C09J2201/36](#); [C09J2203/326](#); [H01L21/67132](#); [H01L2221/68318](#); [H01L2221/68327](#); [H01L2221/68336](#); [H01L2221/68359](#); [H01L2224/27436](#); [H01L2224/2919](#)

**C-sets:**

- [H01L2224/2919](#), [H01L2924/0665](#), [H01L2924/00](#),
- [H01L2924/0665](#), [H01L2924/00](#),
- [H01L2924/0132](#), [H01L2924/01031](#), [H01L2924/01033](#), [H01L2224/73265](#),
- [H01L2224/32225](#), [H01L2224/48227](#), [H01L2924/00012](#), [H01L2924/15311](#),
- [H01L2224/73265](#) %2, [H01L2224/32225](#) %2, [H01L2224/48227](#) %2, [H01L2924/00](#),
- [H01L2224/92247](#), [H01L2224/73265](#),
- [H01L2224/32225](#), [H01L2224/48227](#), [H01L2924/00](#),
- [H01L2924/3512](#), [H01L2924/00](#)

→ less

Past:

- only C-Sets from EPO/USPTO were displayed
- C-Sets not searchable

Recent developments:

- Also C-sets from CPCNO Offices are displayed & searchable
- in “Smart search” and by using “cpcC”

**Espacenet: free access to the database of over 90 million patents**

Smart search:  Siemens EP 2007

[cpcC=C08F8/30 AND cpcC=C08F297/02](#)

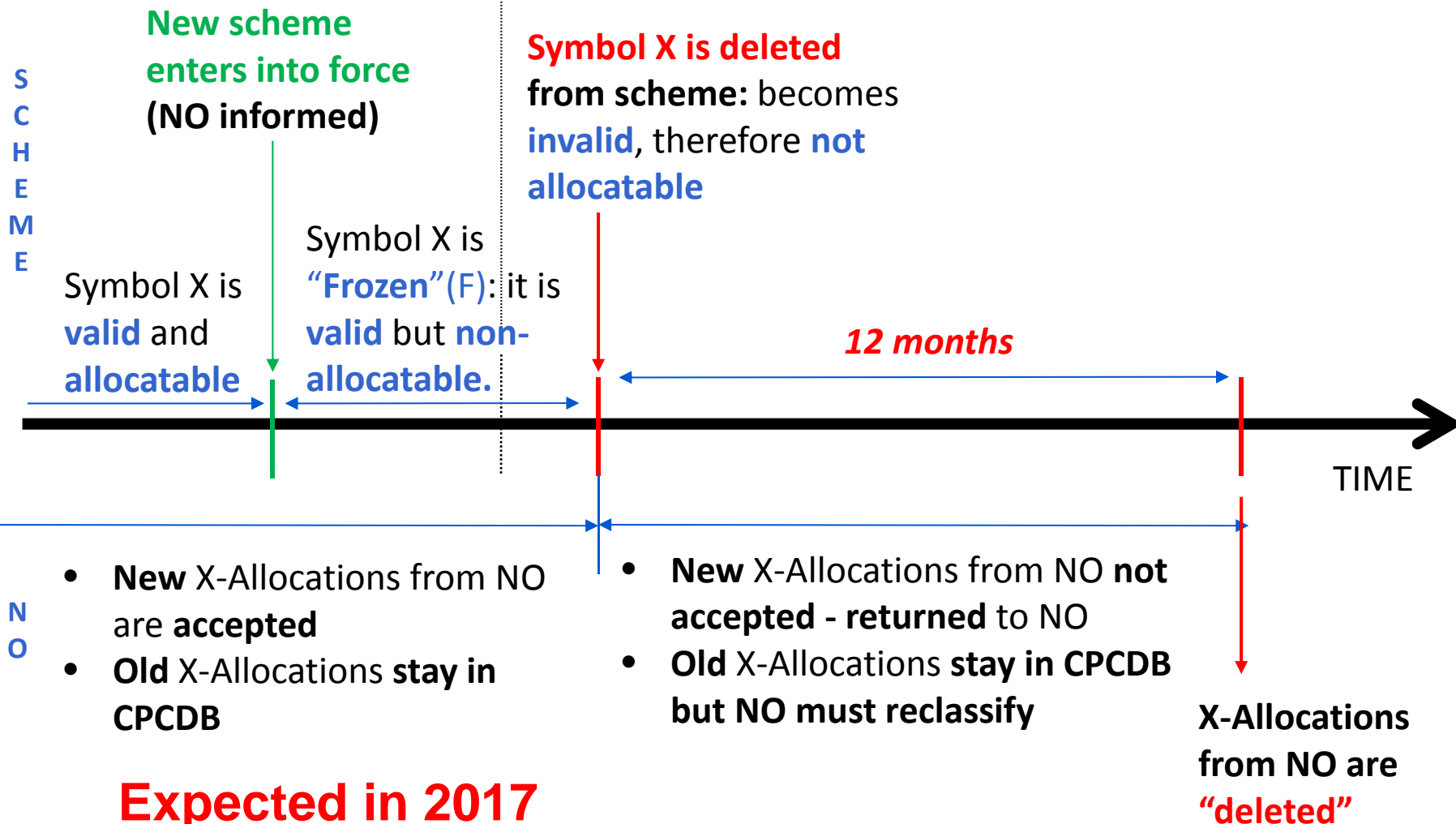
# **Future developments**

## **Expiration of outdated CPCNO allocations**

# Expiration of outdated CPCNO allocations

Situation: following a CPC revision, symbol X is to be deleted from the CPC scheme

EPO/USPTO reclassification completed



## Expiration of outdated CPC allocations (cont'd)

- There are many CPC scheme revisions
- Classification needs to be made using the **CPC version in force at the time of classification**
- What to do with **outdated CPCNO allocations?**
- **An Invalid CPCNO allocation WILL be deleted** from CPCDB **12 months** from the date **a symbol is deleted** from the scheme

# Future developments

**A new approach for CPCNO data (CPC-INT project)**

# CPC-INT: current picture

document level  
(CPCNO)



family level  
(CPC)



INPI Brazil	BR9910073	H01R 12/71; H01R 13/6581	
SIPO	CN1306684	H01R 13/65	
EPO	EP1075714	H01R 12/71; H01R 13/6581	
UKIPO	GB2353908	H01R 12/73	
KIPO	KR20010071195	H01R 13/6581	
PRV	SE0003892	H01R 13/6581	
USPTO	US6206729	H01R 12/71; H01R 13/6581	

# CPC-INT: future picture

document level  
(CPCNO)



family level  
(CPC)



INPI Brazil	BR9910073	H01R 12/71; H01R 13/6581
SIPO	CN1306684	H01R 13/65
EPO	EP1075714	H01R 12/71; H01R 13/6581
UKIPO	GB2353908	H01R 12/73
KIPO	KR20010071195	H01R 13/6581
PRV	SE0003892	H01R 13/6581
USPTO	US6206729	H01R 12/71; H01R 13/6581

H01R 12/71 (EP, US, BR)  
 H01R 13/6581 (EP, US, SE, KR)  
 H01R 13/65 (CN)  
 H01R 12/73 (GB)

**H01R 12/73 (GB)**

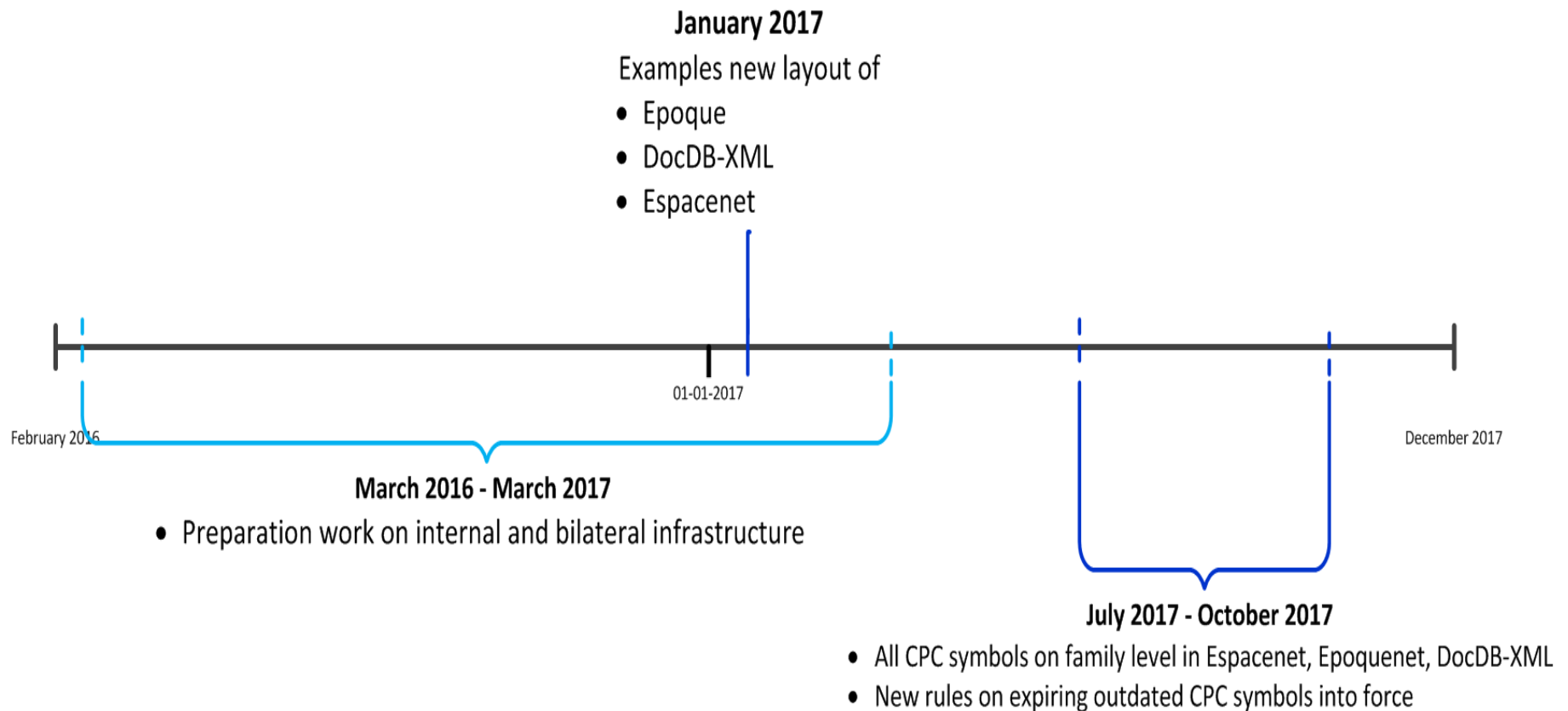
**Expected in 2017**



## CPC-INT: work in progress

- ❖ Requirements for the display of CPC allocations in Epoque and Espacenet are currently collected from the user community
- ❖ All internal and external systems that are requiring adoptions are evaluated in view of the planning
- ❖ New bilateral infrastructure between USPTO and EPO to support the equal level of all CPC allocations is in preparation – National Offices to connect

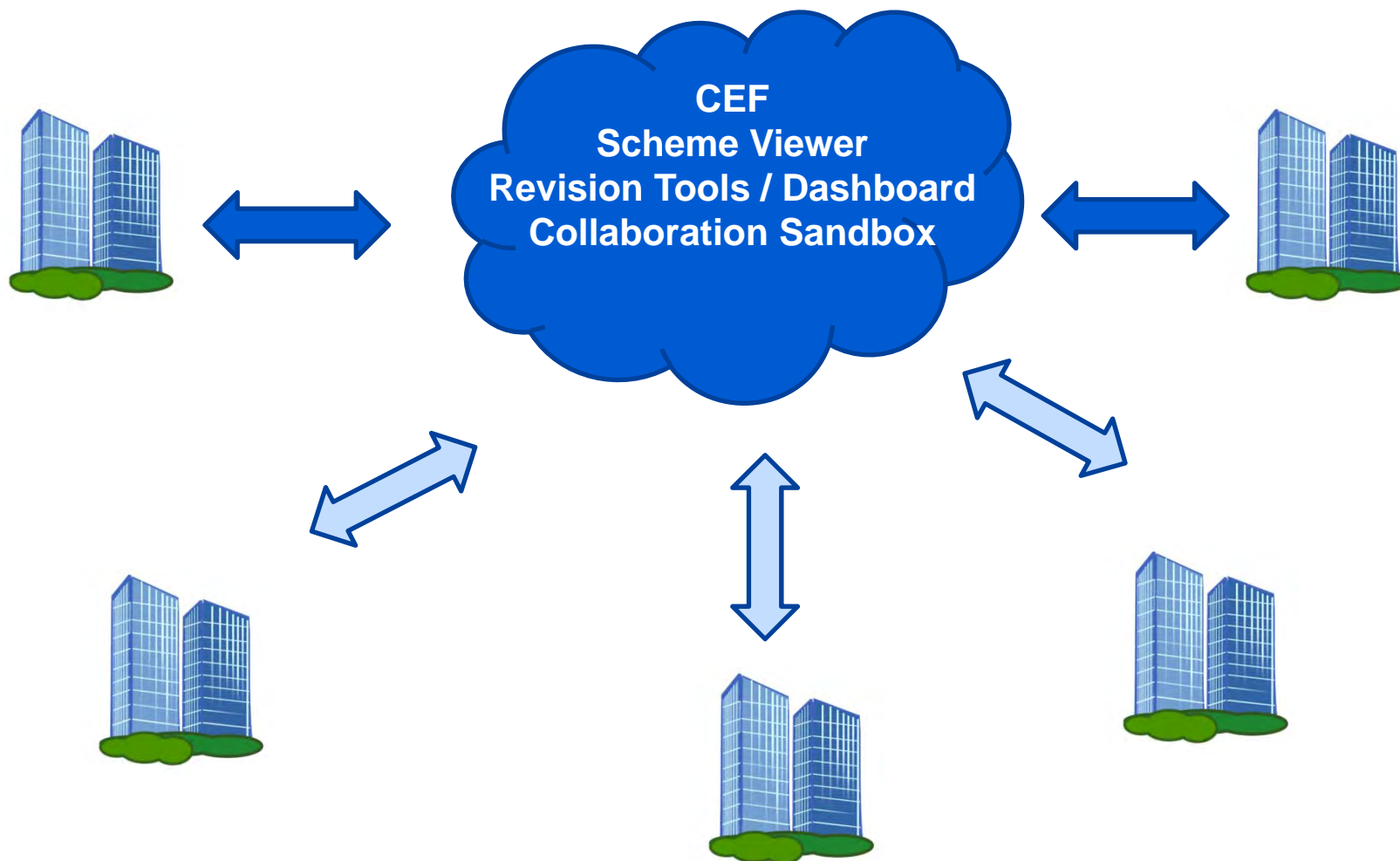
# EPO CPC-INT roadmap



# **Future developments**

## **New Collaborative Environment**

# Future Collaborative Environment



# **Future developments**

## **Machine readable products**

# CPC Products after CPC revisions

Products will be delivered in a **machine-readable** format, e.g. XML (available on [www.cpcinfo.org](http://www.cpcinfo.org))

- RCL (Revision Concordance List)
- CRL (Cross-Reference List)
- CICL (CPC-to-IPC Concordance List)
- Compilation of changes
- Validity File

**All expected in second half of 2016**

Additionally:

- New CPC XML schema – expected to be implemented in **November 2016** CPC release

# CPC Training for National Offices

# CPC Training by USPTO

- Bilateral consultation
  - Examiner(s)/Classifier(s) focused workshop/training environment
  - training material
  - timeline for the training
  - Specific feedback - contact USPTO Classification team (CQIC – Classification Quality and International Coordination Division)



## CPC Training by USPTO (Con.)

- Customize unique technical expert training for each office  
(at USPTO or National Office location)
  - General training
  - Master level training
  - Advanced training in specific technical field
  - Field-Specific Training (FST) on CPC Scheme/Definitions  
(<http://ptoweb.uspto.gov/patents/cpc/fst.html>)
  - Computer Based Training (CBT) e-learning modules  
([http://www.uspto.gov/patents/resources/classification/CPC\\_Training.jsp](http://www.uspto.gov/patents/resources/classification/CPC_Training.jsp))

## CPC Training in 2016 (USPTO)

- **CPC General and/or Advanced Training Event for National Offices:**

- ☐ KIPO – March, 2016

- ☐ KIPO – FALL 2016

- ☐ ISRAEL – (TBD)

- ☐ CHILE – (TBD)

## CPC training provided by EPO

- **CPC scheme + Notes + Warnings + Definitions**
- New training **e-learning modules** by the EPO European Patent Academy on the [cpcinfo.org](http://cpcinfo.org) website (January 2016):
  - [Using CPC in classification](#)
  - [Practical and strategical aspects of the CPC](#)
  - e-learning modules on USPTO's website:  
[http://www.uspto.gov/patents/resources/classification/CPC\\_Training.jsp](http://www.uspto.gov/patents/resources/classification/CPC_Training.jsp)
- **Field-specific training (FST) videos**
  - For training patent examiners at patent offices classifying into CPC:  
go to Epoxy  
<https://epoxy.epo.org/?d=cpcvideo&p=2324,106,2296>

## Overview of CPC Training provided by EPO

- **CPC General Training** (at National Office location):
- **CPC Advanced Training** (three broad areas: Chemistry, Mechanics, Electricity/Physics, at National Office location)
  - ✓ SIPO
  - ✓ INPI Brazil
  - ✓ Rospatent
  - ✓ IMPI Mexico
  - ✓ IP Australia
- **CPC Field-Specific Training** in selected technical fields according to bilateral agreement with each National Office
  - ✓ SIPO, KIPO, INPI Brazil and Rospatent

## CPC Training in 2016 (EPO)

- New training **e-learning modules** by the EPO European Patent Academy on the [cpcinfo.org](http://cpcinfo.org) website (January 2016):
  - [Using CPC in classification](#)
  - [Practical and strategical aspects of the CPC](#)
- **CPC General and Advanced Training Event** for National Offices (EPO member states and non member states) applying CPC (EPO The Hague, 1-2 June 2016)
- Possibly **second CPC General and Advanced Training Event** (EPO, Q3/Q4 2016)
- **Field-specific Training** for a limited number of National Offices (**according to bilateral agreements**) on EPO premises

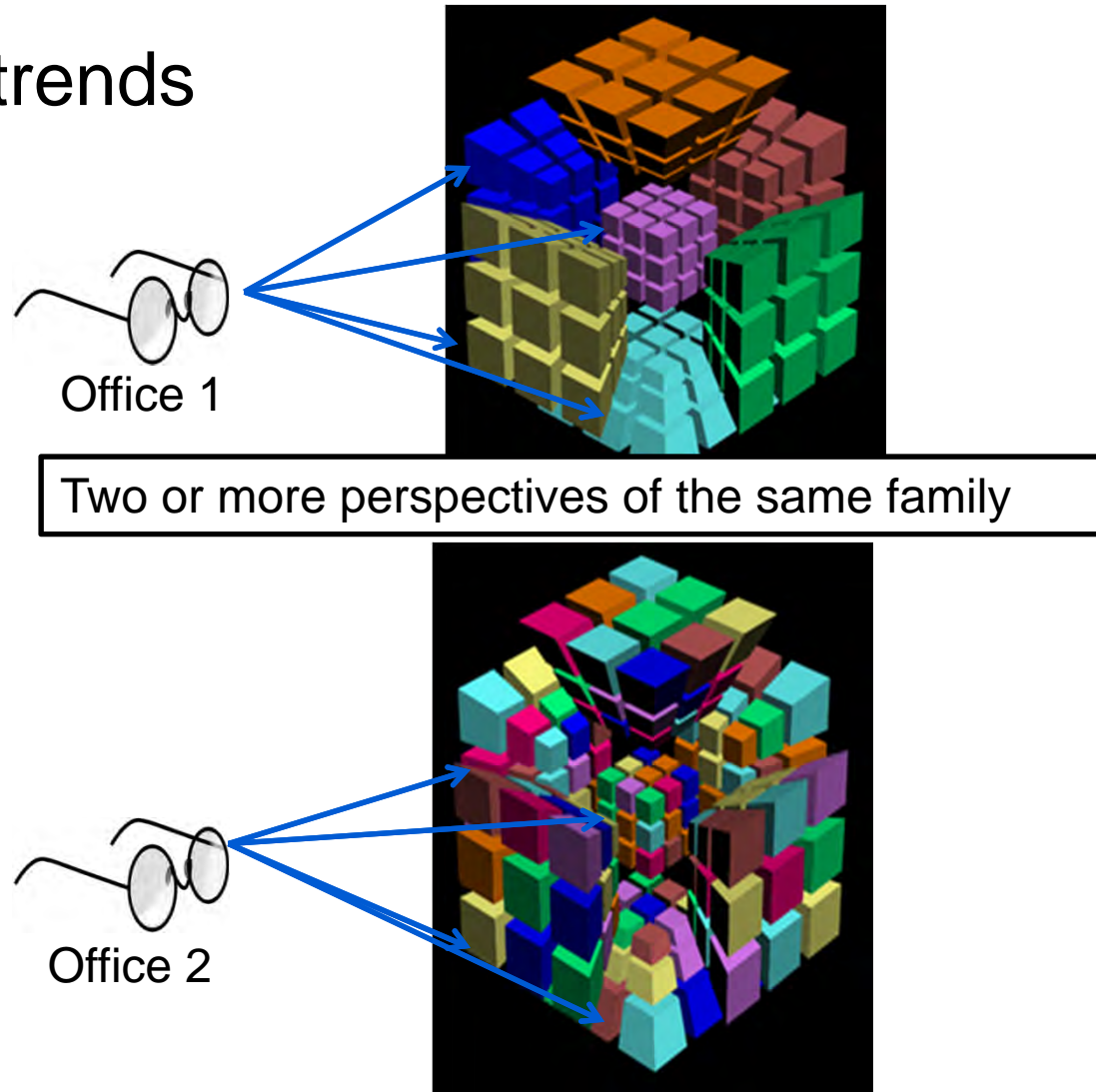
# CPC Quality Measures

## CPC Objective Quality Metrics tool – USPTO

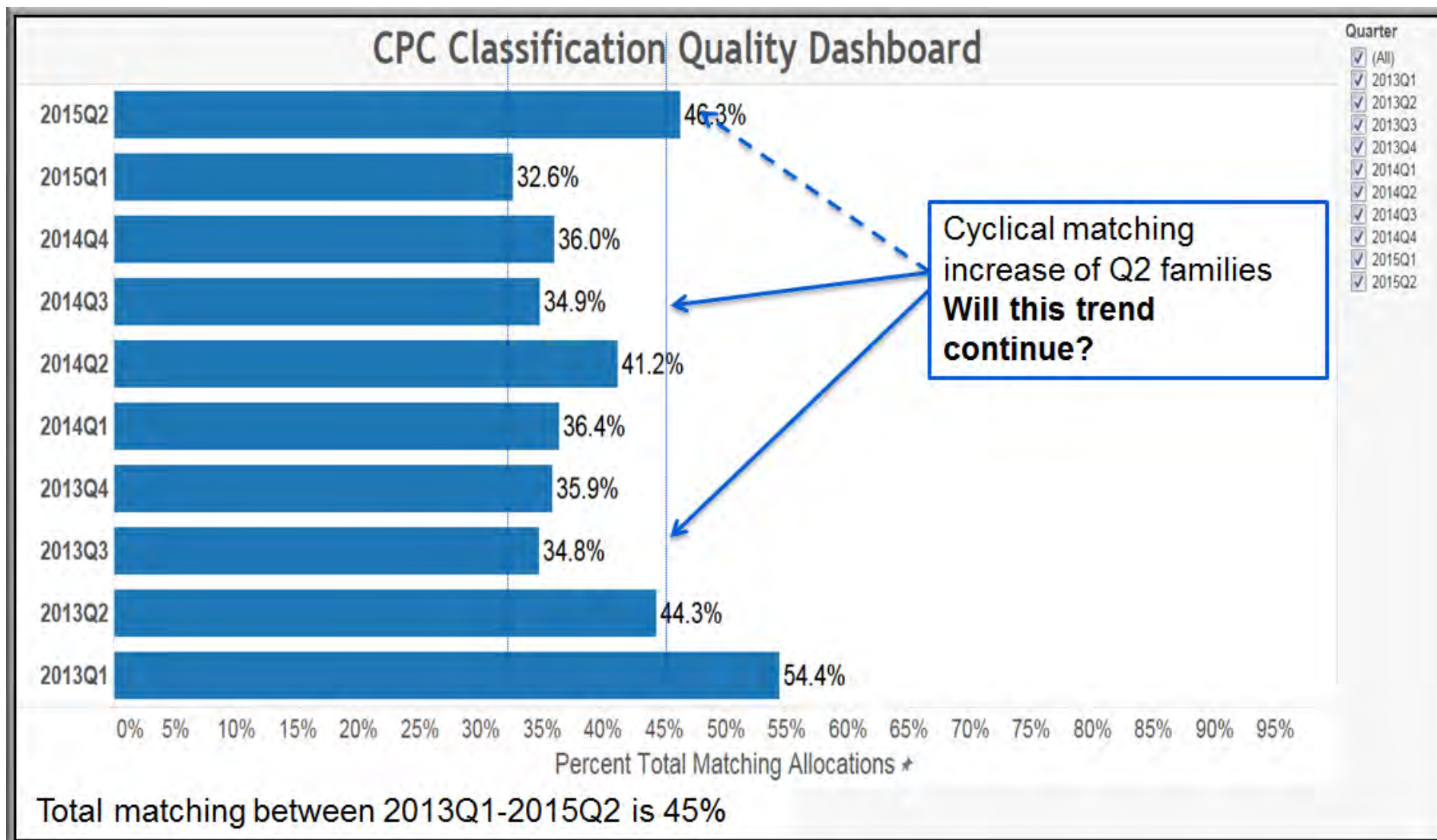
## Purpose:

### Identify classification trends between Offices

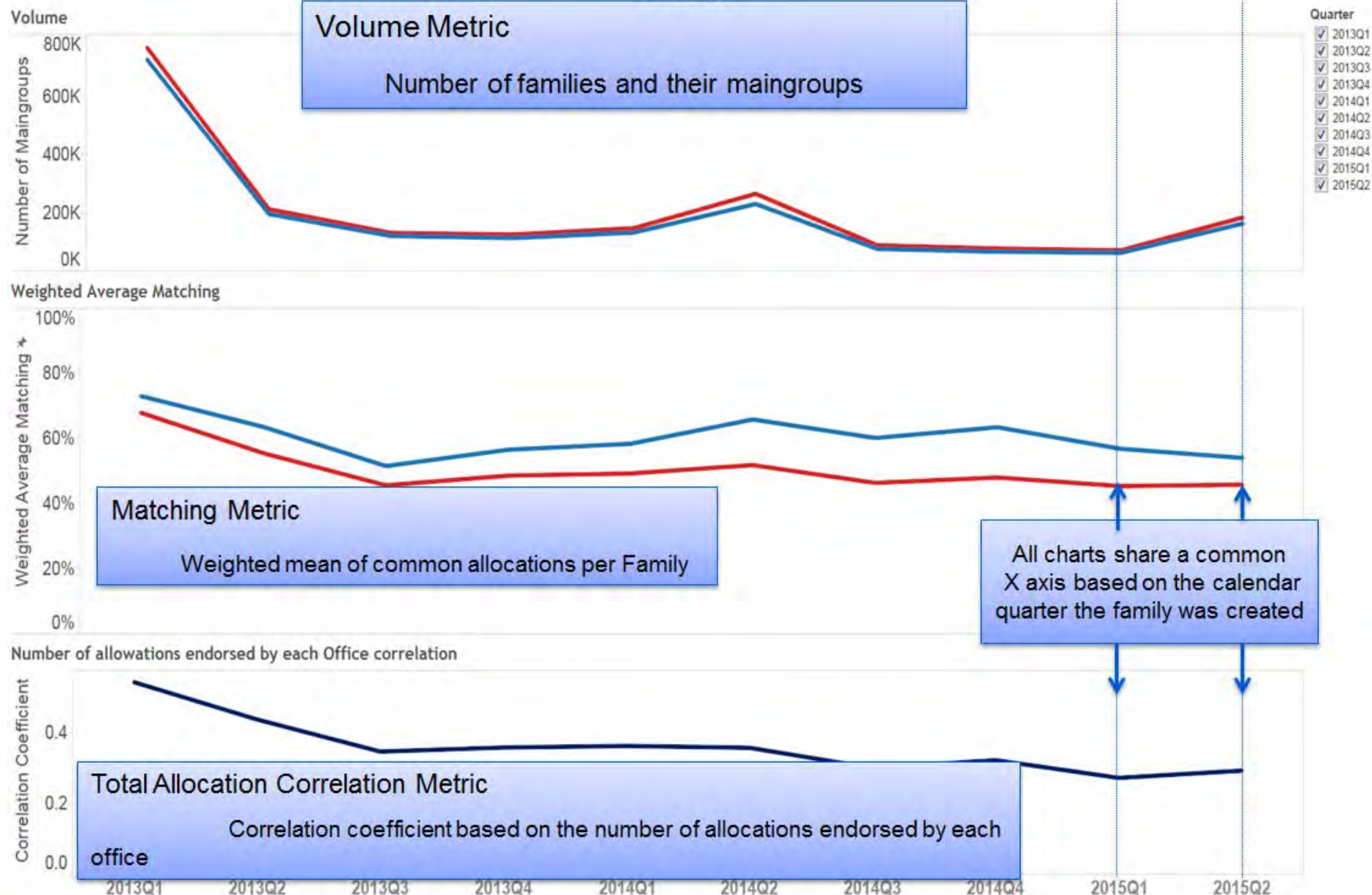
- Convergence
- Divergence
- Under-classification
- Over-Classification





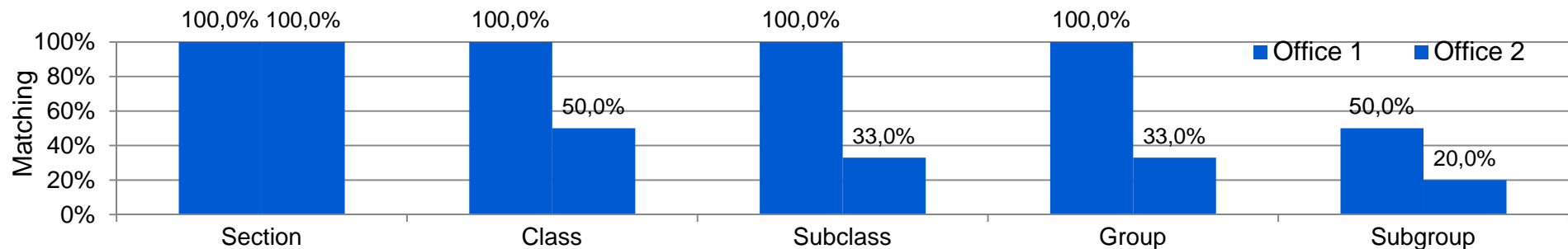
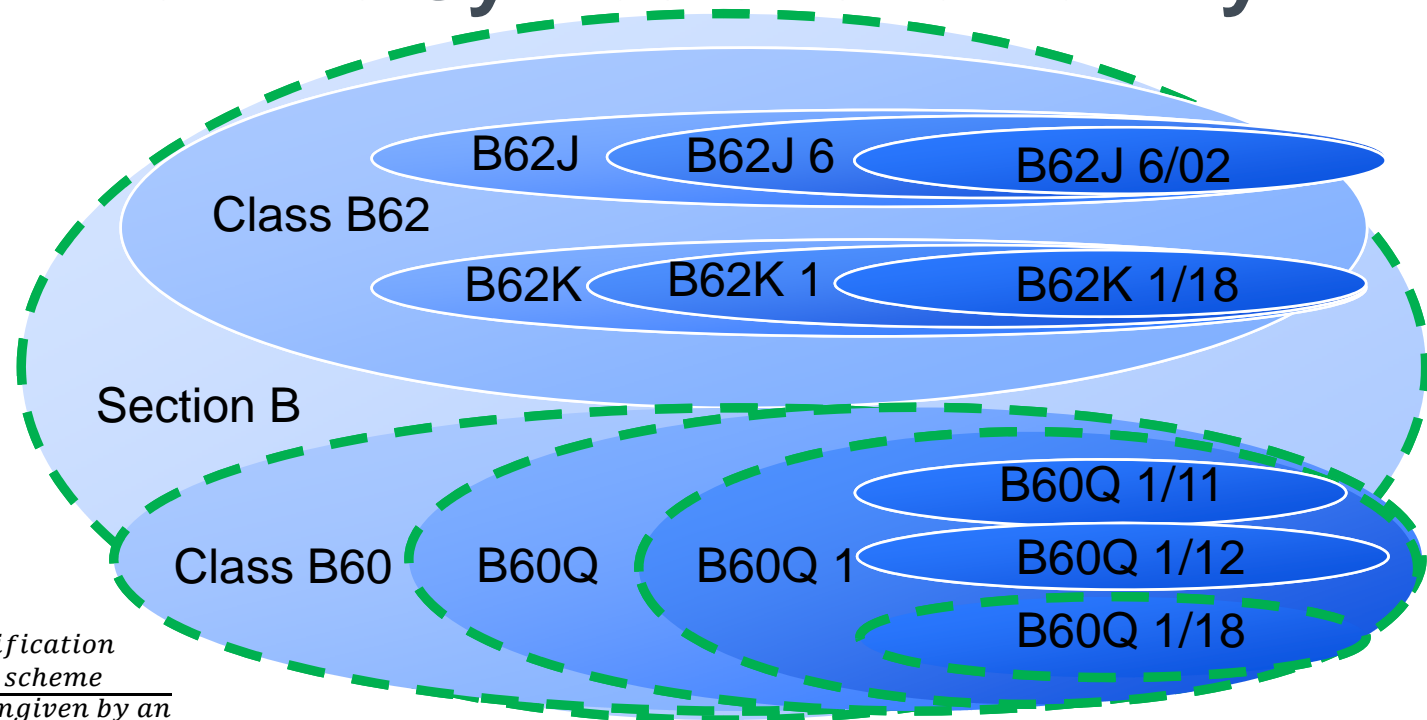


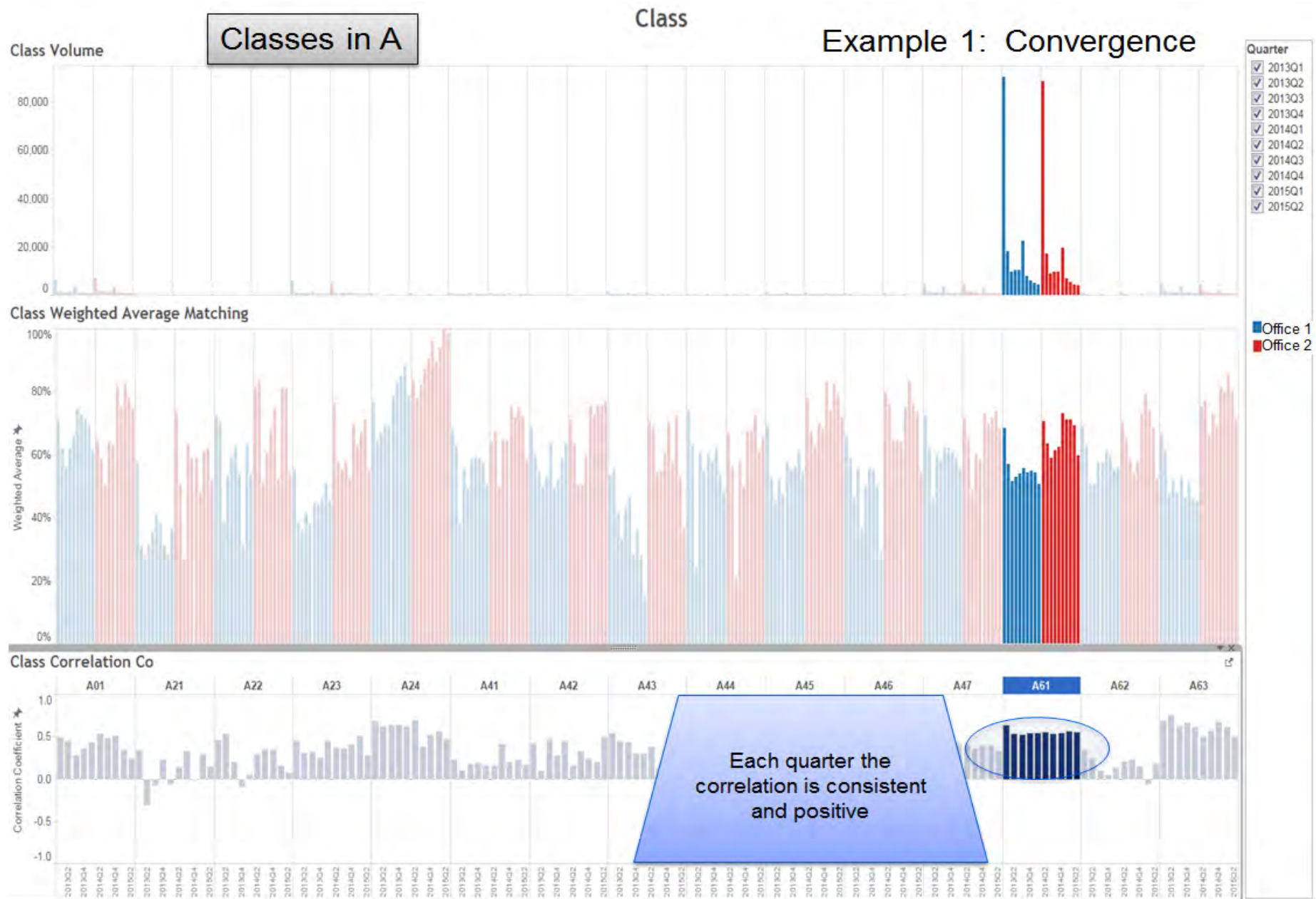
## Overview



# Matching Inventive Symbols for a Family

Office 1	Office 2
B60Q 1/11	B60Q 1/12
B60Q 1/18	B60Q 1/18
	B62J 6/02
	B62K 1/18





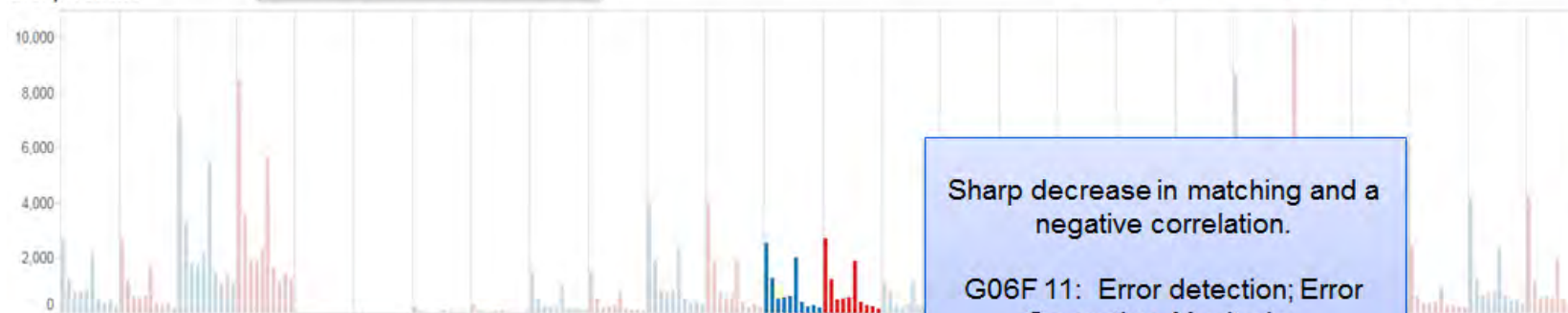


## Groups in G06F

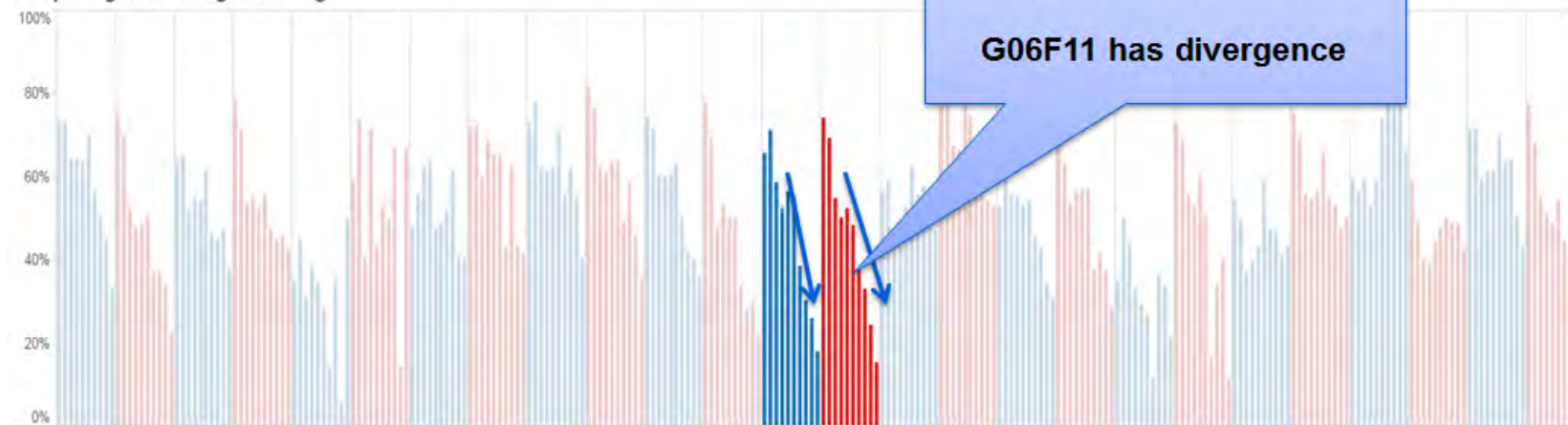
Group

## Example 2: Divergence

Group Volume



Group Weighted Average Matching



Sharp decrease in matching and a negative correlation.

G06F 11: Error detection; Error Correction; Monitoring

**G06F11 has divergence**

Group Correlation Co

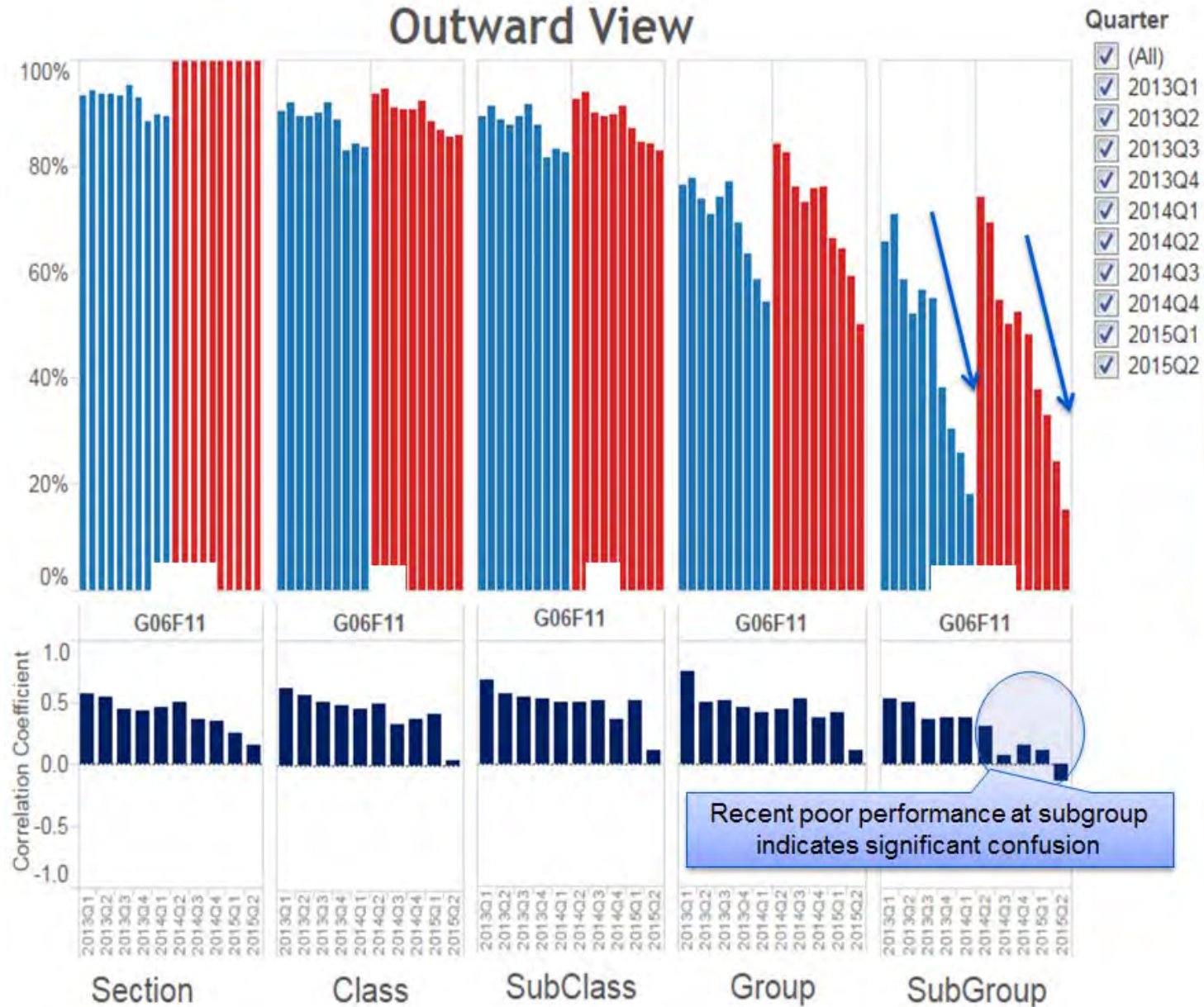


Quarter

- ☒ 2013Q1
- ☒ 2013Q2
- ☒ 2013Q3
- ☒ 2013Q4
- ☒ 2014Q1
- ☒ 2014Q2
- ☒ 2014Q3
- ☒ 2014Q4
- ☒ 2015Q1
- ☒ 2015Q2

■ Office 1  
■ Office 2

## Outward View



- Divergence accelerates from group to subgroup.
- Intellectual problem resolution should begin at subgroup level

## EPO Quality Measures

## CPC Field-Specific Training “Follow-ups”

- Classification of family members by National Office
  - Checks by the EPO technical experts
  - Feedback sent to the National Office
- **Promote interaction**, e.g. via e-mail or telephone



## CPC Quality Assurance for National Offices: Automated Comparison of Documents' Classification (ACDC)

- **Objective method to compare the allocations** provided by two Offices (OF1 and OF2), **to members of the same patent family.**
- OF1 allocations and OF2 allocations on families are compared
- All families which have an earliest family member published in a particular month and which has at least one OF1 allocation and at least one OF2 allocation, are compared.
- The symbols allocated are **sorted per technical field** (according to an established list) and the calculations are performed only per technical field, ignoring the other symbols of other fields.

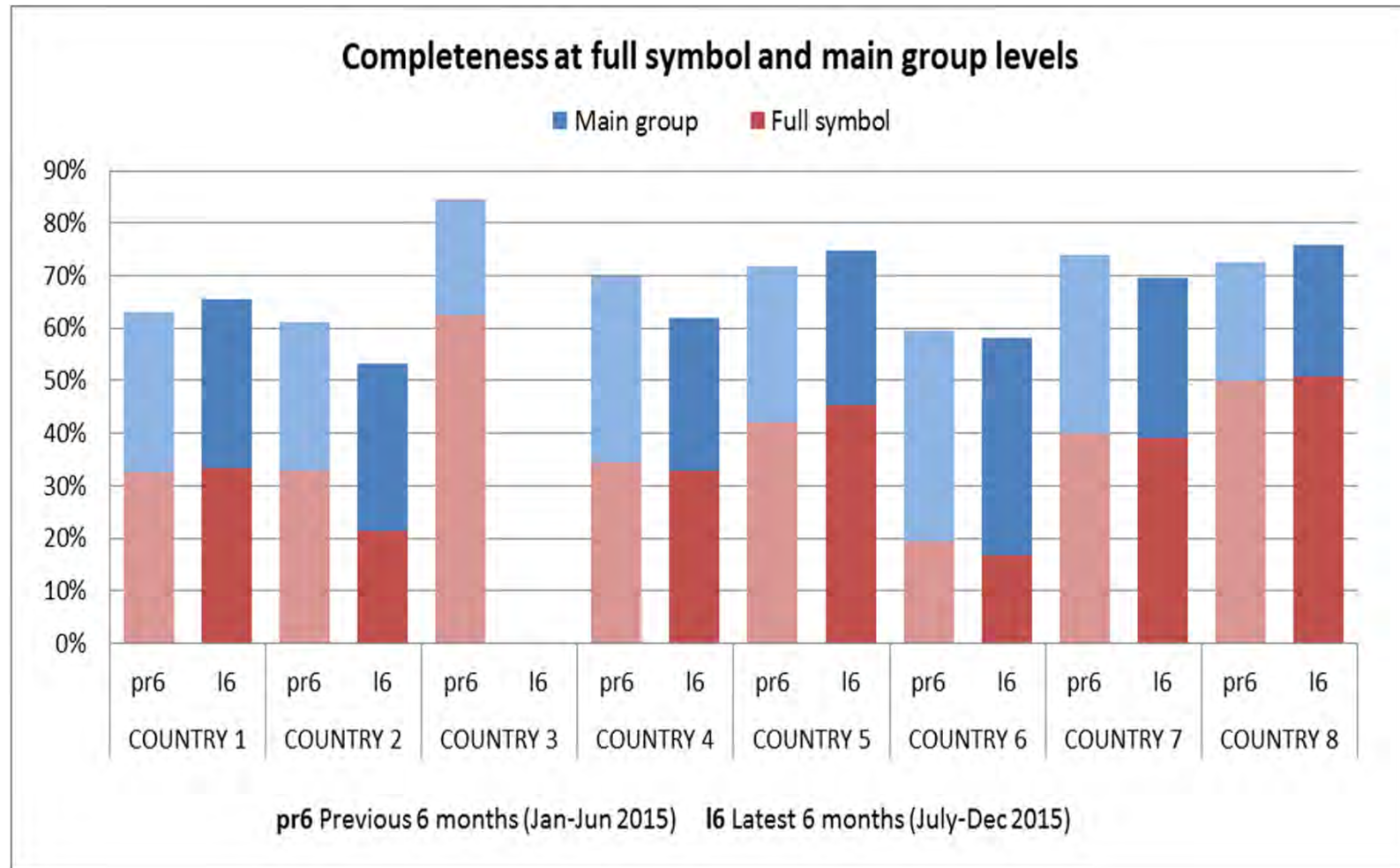
## Parameters

- The parameters measured are the number of shared allocations per family (allocated by OF1 and OF2), divided by either the total number of OF1 allocations or the number of OF2 allocations.
- Looking at the situation from the **viewpoint of OF1**:
  - The number of shared allocations divided by the allocations given by OF1 is a parameter for **completeness**
  - The number of shared allocations divided by the allocations given by OF2 is a parameter for **correctness**
- Looking at it from the **viewpoint of OF2** it would be the other way around
- Parameters are measured at **different levels**: Main Group, Subgroup, 2000 series, etc.

## Example

- A patent family with **document A classified by OF1** and **document B classified by OF2**
- Document A (OF1): 5 allocations  
F21K9/00, H01L23/3675, H01L25/167, H05B33/0803, H05K1/0203
- Document B (OF2): 4 allocations  
F21K9/00, H01L23/3675, H01L25/167, H05K1/02
- Shared: 3 allocations
- Looking from side of OF1 (OF1 is the benchmark):
  - completeness = 60% (3 out of 5)
  - correctness = 75% (3 out of 4)
- Looking from side of OF2 (OF2 is the benchmark):
  - completeness = 75% (3 out of 4)
  - correctness = 60% (3 out of 5)

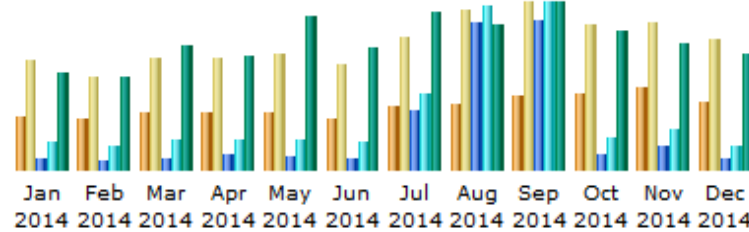
## Example of Quality Report for National Offices



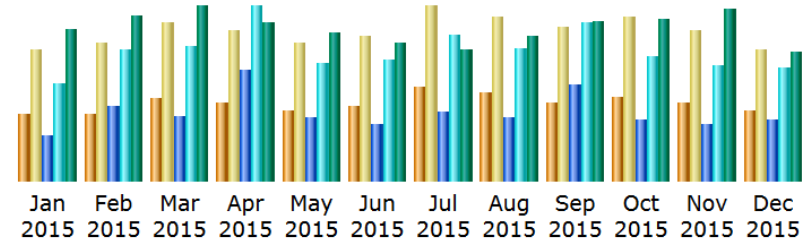
# Statistics on the usage of the [www.cpcinfo.org](http://www.cpcinfo.org)

# Monthly traffic history 2015 vs. 2014

Monthly history



Monthly history



Month	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Jan 2014	8596	17272	62799	138509	30.13 GB
Feb 2014	8238	15049	46416	119988	28.58 GB
Mar 2014	9433	17917	60180	145654	38.10 GB
Apr 2014	9173	17829	75972	150526	35.12 GB
May 2014	9235	18526	66567	150475	47.37 GB
Jun 2014	8196	16886	58249	141420	37.50 GB
Jul 2014	10390	21267	292727	380047	48.26 GB
Aug 2014	10595	25382	716524	787741	44.48 GB
Sep 2014	11702	26739	726029	814612	51.54 GB
Oct 2014	12348	23091	72567	162734	42.48 GB
Nov 2014	13095	23619	122644	203377	38.41 GB
Dec 2014	10923	21061	60339	124414	35.53 GB
Total	121924	244638	2361013	3319497	477.50 GB

Month	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Jan 2015	11418	22643	67205	143497	38.73 GB
Feb 2015	11629	24064	109214	189951	41.98 GB
Mar 2015	14083	27207	95053	196218	44.39 GB
Apr 2015	13397	26036	161462	254442	40.35 GB
May 2015	12352	24080	91297	172263	37.71 GB
Jun 2015	12779	24837	84715	176190	35.38 GB
Jul 2015	16209	30108	101562	213090	33.50 GB
Aug 2015	15189	28170	91202	192409	36.62 GB
Sep 2015	13554	26622	140573	230482	40.83 GB
Oct 2015	14455	28242	88134	181119	41.17 GB
Nov 2015	13430	25829	82196	166837	43.81 GB
Dec 2015	12094	22688	89678	166652	32.87 GB
Total	160589	310526	1202291	2283150	467.34 GB

- Number of unique visitors keeps increasing
  - + 40,000 w.r.t. 2014 i.e. +30%
- Bandwidth usage stable at about 40 GB per month

# Top 10 URLs 2015 vs. 2014

2014

Pages-URL (Top 10) - Full list - Entry - Exit					
4712 different pages-url	Viewed	Average size	Entry	Exit	
/	97582	3.53 KB	56102	36018	
/cpc/scheme/A/scheme-A23P.pdf	84301	5.47 KB	66	67	
/cpc/interleaved/A/A21D-interleaved.pdf	81077	10.59 KB	11	15	
/cpc/interleaved/H/H02B-interleaved.pdf	74169	12.04 KB	17	17	
/cpc/scheme/A/scheme-A41G.pdf	72169	5.39 KB	43	45	
/cpc/interleaved/F/F23M-interleaved.pdf	69047	7.92 KB	36	35	
/cpc/interleaved/G/G21B-interleaved.pdf	66224	2.99 KB	39	38	
/cpc/interleaved/B/B31C-interleaved.pdf	64626	4.72 KB	5	5	
/cpcSchemeAndDefinitions/table.html	56918	96.37 KB	13825	8405	
/index/rss-latest-news.xml	54787	4.21 KB	16752	16905	
Others	1640113	293.24 KB	157742	183088	

2015

Pages-URL (Top 10) - Full list - Entry - Exit					
4049 different pages-url	Viewed	Average size	Entry	Exit	
/	178930	3.45 KB	92864	68470	
/index/rss-latest-news.xml	78605	9.37 KB	20081	20175	
/cpcSchemeAndDefinitions/table.html	52443	72.59 KB	14847	8378	
/cpc/interleaved/CPCSchemePDF201504.zip	50369	170.31 KB	9181	9302	
/cpc/interleaved/CPCSchemePDF201412.zip	41114	93.88 KB	4493	4548	
/cpcSchemeAndDefinitions/Bulk.html	33522	5.15 KB	6740	6429	
/cpc/definition/B/definition-B28D.pdf	33085	14.59 KB	9	7	
/cpcSchemeAndDefinitions.html	29811	13.32 KB	4195	4297	
/cpc/scheme/A/scheme-A63D.pdf	17877	10.90 KB	16	16	
/cpc/definition/A/definition-A47B.pdf	16484	634.84 KB	2464	2493	

# Origins of connections

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Origin		Pages	Percent	Hits	Percent
<b>Direct address / Bookmarks</b>		675359	77.7 %	728666	78.8 %
<b>Links from a NewsGroup</b>					
<b>Links from an Internet Search Engine - <a href="#">Full list</a></b>		120792	13.9 %	121349	13.1 %
- Google	115595 116152				
- Ask	2243 2243				
- Baidu	817 817				
- Sogou	728 728				
- Yahoo!	626 626				
- Yandex	324 324				
- Unknown search engines	283 283				
- My Search	71 71				
- AOL	51 51				
- MyWebSearch	15 15				
- Others	39 39				



# Origins of connections

<b>Links from an external page (other web sites except search engines) - Full list</b>	72356	8.3 %	74600	8 %
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- <a href="http://www.uspto.gov/patents-application-process/patent-search/c...">http://www.uspto.gov/patents-application-process/patent-search/c...</a> 6198 6198				
- <a href="http://worldwide.espacenet.com/searchResults">http://worldwide.espacenet.com/searchResults</a> 3789 3789				
- <a href="http://ptoweb.uspto.gov/patents/cpc/tools.html">http://ptoweb.uspto.gov/patents/cpc/tools.html</a> 3315 3315				
- <a href="http://worldwide.espacenet.com/publicationDetails/biblio">http://worldwide.espacenet.com/publicationDetails/biblio</a> 2636 2636				
- <a href="http://www.epo.org/searching/essentials/classification/cpc.html">http://www.epo.org/searching/essentials/classification/cpc.html</a> 1298 1298				
- <a href="http://www.bing.com/search">http://www.bing.com/search</a> 965 965				
- <a href="http://www.uspto.gov">http://www.uspto.gov</a> 938 938				
- <a href="http://usptopat/sites/TechCtrs/cpc/default.aspx">http://usptopat/sites/TechCtrs/cpc/default.aspx</a> 787 787				
- <a href="http://my.internal.epo.org/portal/private/epo/organisation/strat...">http://my.internal.epo.org/portal/private/epo/organisation/strat...</a> 734 734				
- Others 22971 25215				
<b>Unknown Origin</b>	82	0 %	86	0 %

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