EMI SA2 Report

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EMI AHM, Budapest, Oct 2012

EMI 1&2: Metrics Monitoring

- Little development required since metrics should be in place before year 3 start.

- Mostly metrics monitoring for the majority of year 3.

- Summary of past 6 months:
  - Change to Dashboard for Year 2 review
  - Metric generation for period reports
  - Lintian Analyser
  - Rpmlint Analyser with 2011 comparison

EMI RfC Dashboard

RfC items	Show	Confined Search
Priorities	☑	All / immediate / high
Tracker/Family	☑	All / Bugzilla/ARC RT/dCache
Status	☐	All / open
Detection Area	☐	All / production
Severity	☐	All

Columns to display

Products	☑ Category	☑
UID	☑ GGUS Ticket URL	☑
Submitted On	☑ Ended On	☑
Affected EMI Major Release	☐ Target EMI Major Release	☐
Affected Platforms	☐ Title	☐
Associated Test	☐ Total items of this kind	☐

Range setting(s)   Date(s)

Submitted before: ☐
Submitted after: ☐
Ended before: ☐
Ended after: ☐
Open/Closed Status Open: ○ Closed: ● All: ○

Request for Change **Dashboard**

[Update Table] [Reset All Buttons] [Create CSV]

	Product	Tracker Category	Priority	Tracker/Family	UID	SubmittedOn	EndedOn
1	ARC	A-REX	immediate	Bugzilla/Nordugrid	2905	2012-08-24T14:55:30	Not closed yet
2	ARC	Batch system back-ends	immediate	Bugzilla/Nordugrid	2939	2012-09-14T12:36:42	Not closed yet
3	L&B & glite-gsoap/gss	LB	high	Sav/gLite	97255	2012-09-04T14:24:41	Not closed yet
4	TORQUE WN config & TORQUE server config	TORQUE	high	Sav/gLite	93074	2012-03-28T12:46:30	Not closed yet
5	UNICORE TSI	TSI	high	SF/UNICORE	3555638	2012-08-09T03:45:00	Not closed yet
6	[legacy UNICORE]	Installer	high	SF/UNICORE	3540404	2012-07-05T02:17:00	Not closed yet
7	[legacy UNICORE]	Rich Client	high	SF/UNICORE	3547853	2012-07-24T03:49:00	Not closed yet
8	[legacy UNICORE]	Server	high	SF/UNICORE	3025969	2010-07-06T12:26:00	Not closed yet
9	[legacy UNICORE]	Server	high	SF/UNICORE	3390502	2011-08-12T04:19:00	Not closed yet
10	[legacy UNICORE]	Workflow System	high	SF/UNICORE	3167206	2011-01-28T09:58:00	Not closed yet
11	[legacy UNICORE]	Workflow System	high	SF/UNICORE	3386709	2011-08-05T04:14:00	Not closed yet
12	[legacy gLite]	Information providers	high	Sav/gLite	96306	2012-07-25T09:42:12	Not closed yet
13	[legacy gLite]	Information providers	high	Sav/gLite	96310	2012-07-25T11:34:05	Not closed yet

Dashboard highlights the Immediate/High Priority RfCs in state Open per Product/Tracker

Lintian Analyser (Recent Work)

Collecting all the Lintian Reports into one location to provide an overview per Product.

Detailed Lintian report for each EMI package: **CLICK HERE**

260 packages analyzed.

4 tables generated. These tables as CSV: **lintian.csv**

Total of 36 Products affected. 5 components failed to be mapped to a product.

Product	Number of Packages	Number of Errors	Number of Warnings
AMGA	1	2	2
APEL publisher	2	5	4
ARC	5	4	2
ARGUS	12	32	40
ARGUS EES	11	4	8
BDII Core	2	4	4
BDII Site	1	2	3

Lintian Analyser Overview

Number Of Different Errors (N)	Number of Packages (P)	Percentage of Total Packages (P/260*100)
0	86	37.5%
1	73	31.8%
2	36	15.7%
3	27	11.8%

Number Of Different Warnings (N)	Number of Packages (P)	Percentage of Total Packages (P/260*100)
0	102	25%
1	68	26.15%
2	42	16.15%
3	20	12.3%

Lintian Analyser Overview

Ranking	Name of Error	Percentage of compliance if the errors are fixed
1	no-copyright-file	37.5%
2	extended-description-is-empty	40.6%
3	helper-templates-in-copyright	53.7%
4	non-standard-toplevel-dir	79.6%
5	description-synopsis-is-duplicated	82.1%

Rpmlint Comparison (Dec 2011)

The improvement is large whilst almost doubling the number of RPMs

Number Of Different Errors (N)	Current Values Number of Packages (P of 1051)	Prev. Values (9th Dec 2011) Number of Packages (P of 635)
0	36.5% (384)	0.0% (0)
1	31.8% (334)	4.3% (27)
2	15.6% (164)	39.1% (248)
3	6.4% (68)	17.3% (110)
4-5	7.0% (74)	23.3% (148)
6-13	2.5% (27)	14.5% (92)

Factors affecting compliance:
- Some packages are not intended to be in EPEL (either technical limitations or PT's option)
- There are some false errors

Rpmlint Analyser (Warnings)

Number Of Different Warnings (N)	Number of Packages (P)	Percentage of Total Packages (P/1051*100)
0	17	1.6%
1	105	10%
2	209	19.88%
3	262	24.93%
4	196	18.65%
5	103	9.8%
6	76	7.23%
7-16	83	7.9%

Quality Control – Task 2.7

Quality control activities

- Verification of released products
- Static analysis of product packages
- Reporting of quality performance

How do we verify products?

- Products passing the first step are moved to "Ready for Testbed"

- While products are checked on EMI testbed, PTs have the opportunity to fix any minor non conformity

- Products passing the test-bed checks are moved to "Deployed on Testbed"

- If all minor nonconformities have been fixed, the product is eventually **verified** ;)

- Not addressed nonconformities are discussed again with PTs so to find out possible solutions for them

Verification dashboard

EMI 1&2: General Measurements

- EPEL Conformity (cont.)
- Availability of Binary and Source Packages
- Mandatory tests
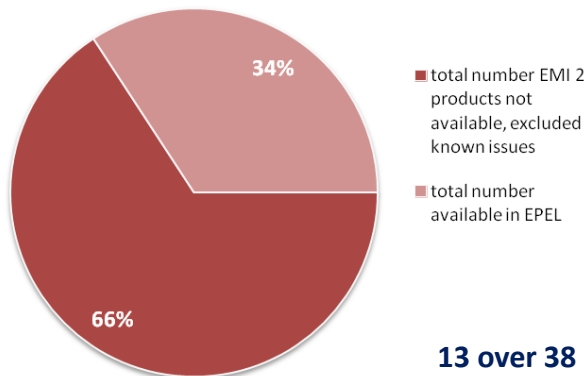- Associated tests
- Certification report
- Listed RfC

EMI 2: EPEL Conformity

EPEL Conformity
July 2012

23%

77%

- total number of EMI 2 products not available
- total number available in EPEL

Strict EPEL Conformity
July 2012

34%

66%

- total number EMI 2 products not available, excluded known issues
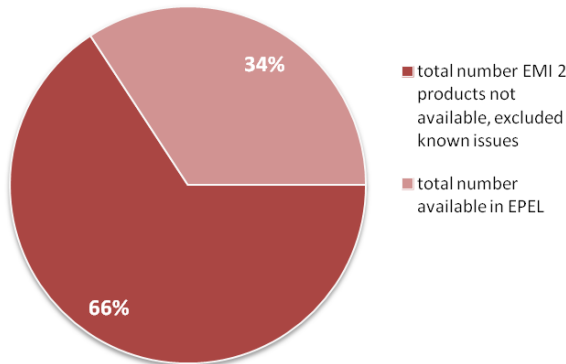- total number available in EPEL

13 over 38
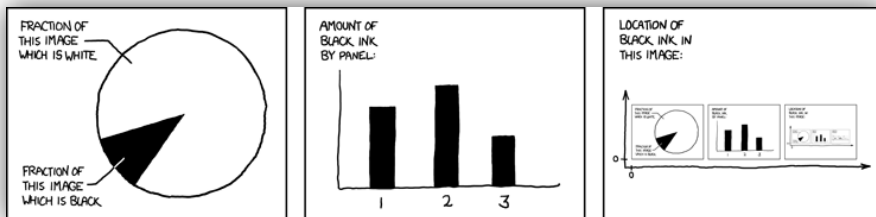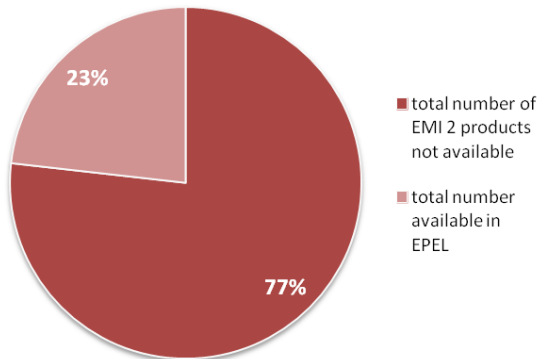
- Percentage of products being able to conform with EPEL packaging policy (July 2012)

EMI 2: EPEL Conformity

Strict EPEL Conformity
July 2012

34%
66%

- total number EMI 2 products not available, excluded known issues
- total number available in EPEL

Strict EPEL Conformity
October 2012

38%
62%

- total number EMI 2 products not available, excluded known issues
- total number available in EPEL

13 over 34
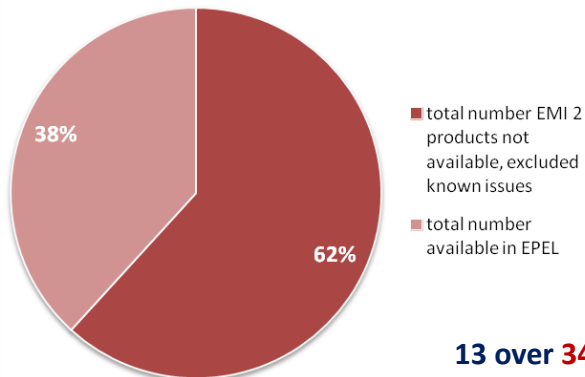
- Moving from July to October the number of products being potentially able to become EPEL compliant decreased.

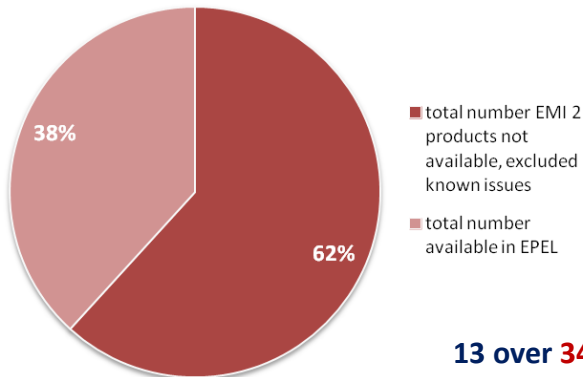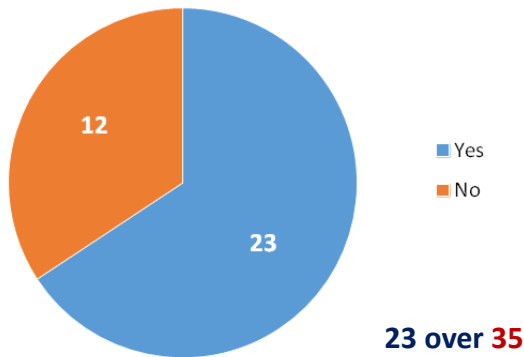EUROPEAN MIDDLEWARE INITIATIVE

PTs Survey

Strict EPEL Conformity

October 2012

- 38%
- 62%

- total number EMI 2 products not available, excluded known issues
- total number available in EPEL

13 over 34

Are you contributing or planning to contribute your products to the EPEL repository?

- 12
- 23

- Yes
- No

23 over 35

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What about DEBIAN?

PTs Survey

Are you contributing or planning to contribute your products to the DEBIAN repository?
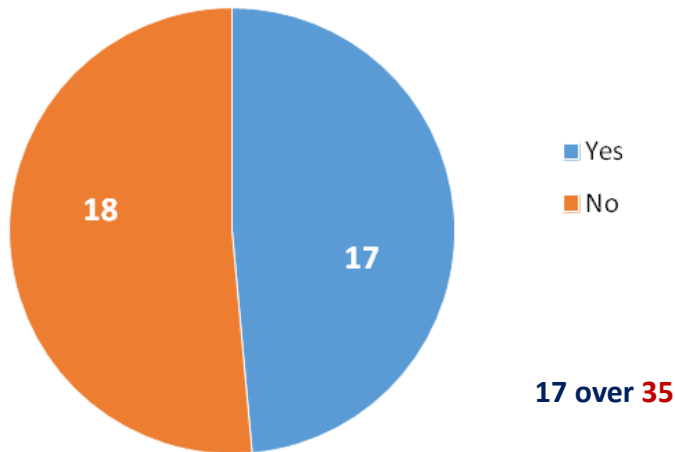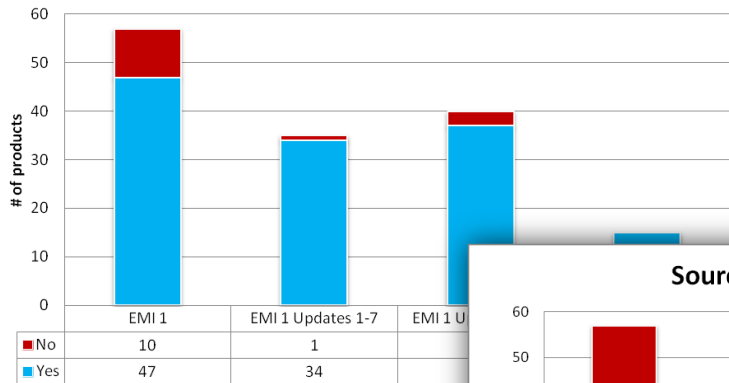
- Yes
- No

18

17

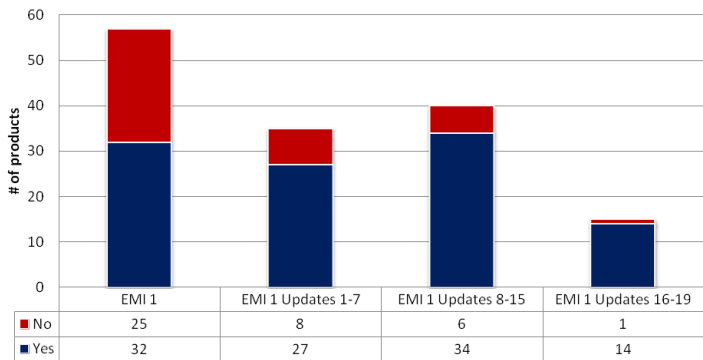**17 over 35**

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EMI 1: Source and Binary Packages

Binary packages availability

	EMI 1	EMI 1 Updates 1-7	EMI 1 U
No	10	1	
Yes	47	34	

Source packages availability

	EMI 1	EMI 1 Updates 1-7	EMI 1 Updates 8-15	EMI 1 Updates 16-19
No	25	8	6	1
Yes	32	27	34	14

EMI 2: Source and Binary Packages

Binary packages availability

	EMI 2
No	1
Yes	52

Source packages availability

	EMI 2	EMI 2 updates 1-3
No	1	2
Yes	52	13

EMI 1: Fundamental tests

% Regression Tests availability

	EMI 1	EMI 1 Updates 1-7
No/Fail	53%	26%
Pass	47%	74%

% Unit Tests availability

	EMI 1	EMI 1 Updates 1-7	EMI 1 Updates 8-15	EMI 1 Updates 16-19
No/Fail	68%	66%	46%	53%
Pass	32%	34%	54%	47%
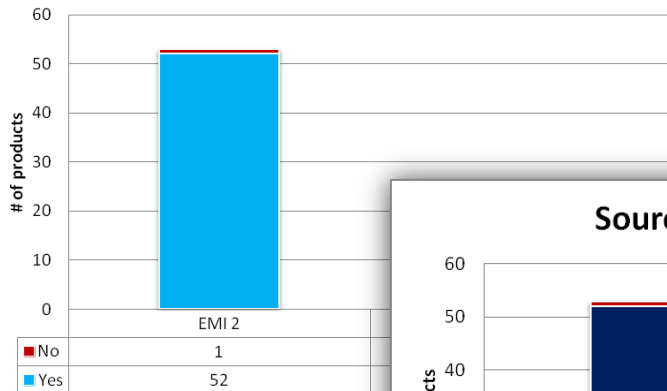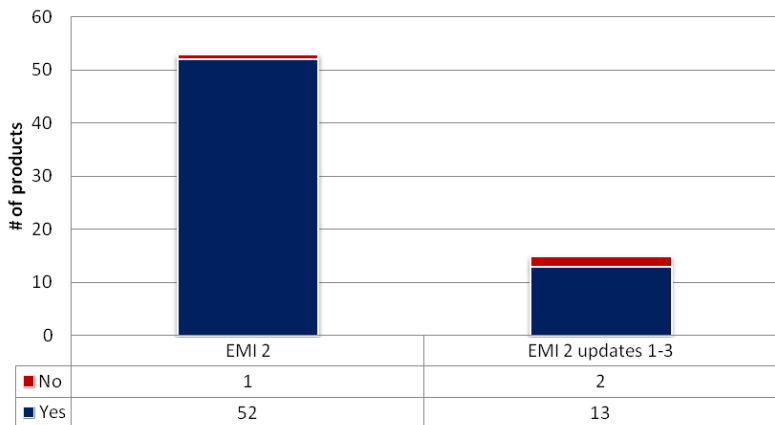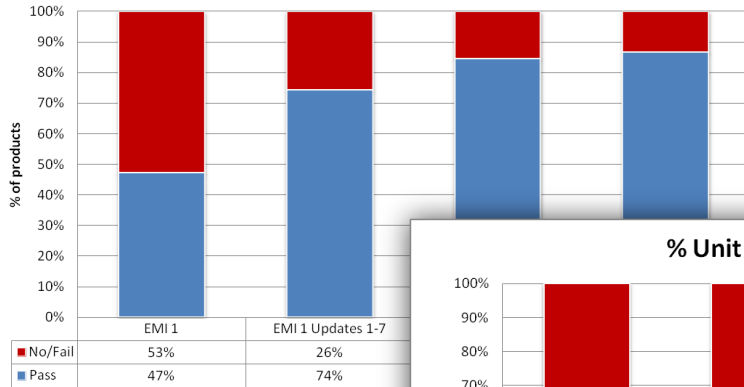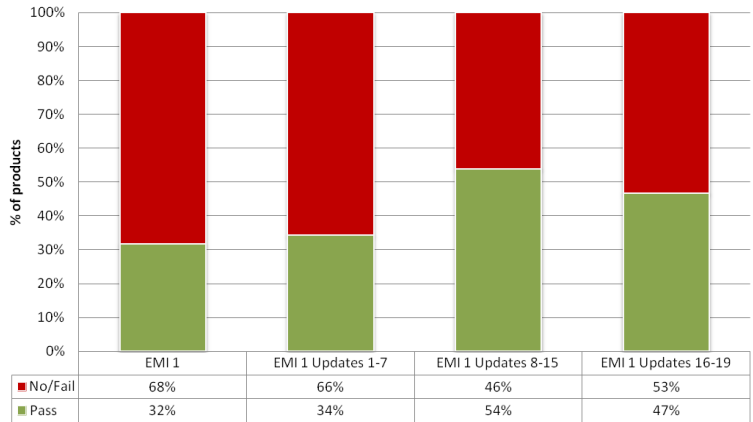
EMI 2: Fundamental tests

% Unit Tests availability
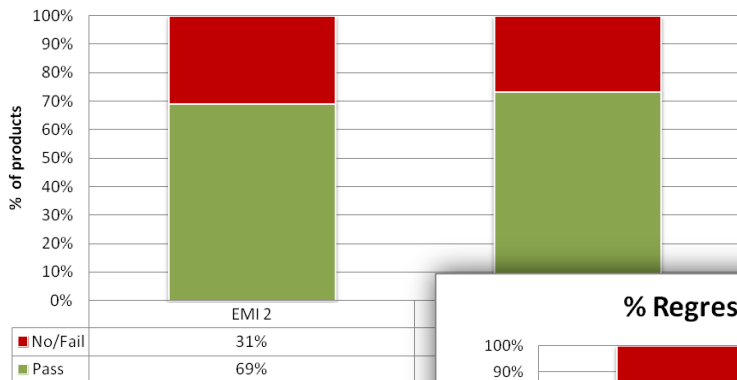
	EMI 2
No/Fail	31%
Pass	69%

% Regression Tests availability

	EMI 2	EMI 2 updates 1-3
No/Fail	17%	33%
Pass	83%	67%

EMI 1 - 2: Fundamental tests

% Regression Tests availability

	EMI 1	EMI 1 Updates 1-7	EMI 1 Updates 8-15	EMI 1 Updates 16-19
No/Fail	53%	26%	15%	13%
Pass	47%	74%	85%	87%
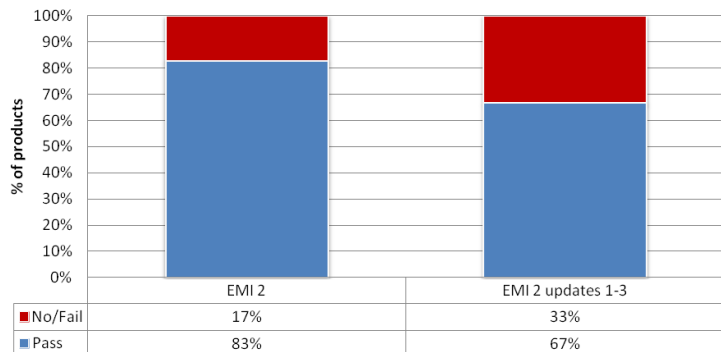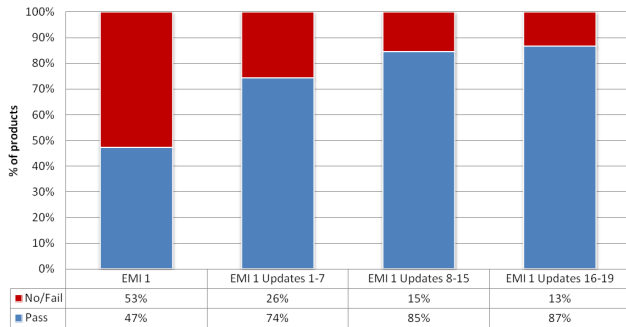
A drop of few % points can be observed moving from EMI 1 to EMI 2

% Regression Tests availability

	EMI 2	EMI 2 updates 1-3
No/Fail	17%	33%
Pass	83%	67%

EMI INFSO-RI-261611
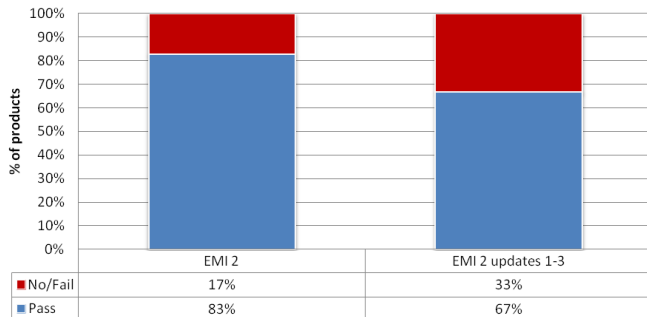
% of certification reports compliant with SA2 policy for EMI 1 release
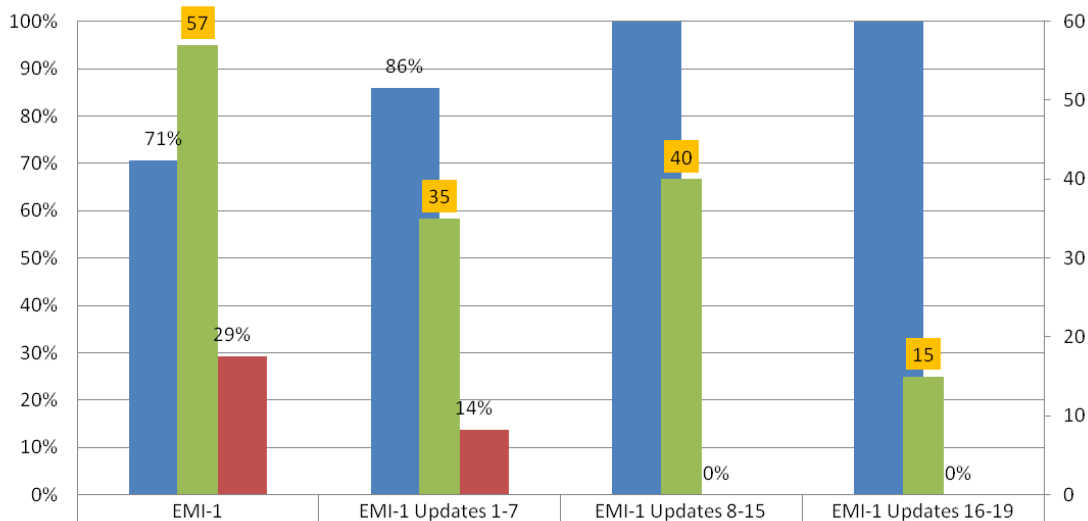
	EMI-1	EMI-1 Updates 1-7	EMI-1 Updates 8-15	EMI-1 Updates 16-19
Compliant	71%	86%	100%	100%
Non-compliant	29%	14%	0%	0%
# of products	57	35	40	15

% of certification reports compliant with SA2 policy for EMI 2 release
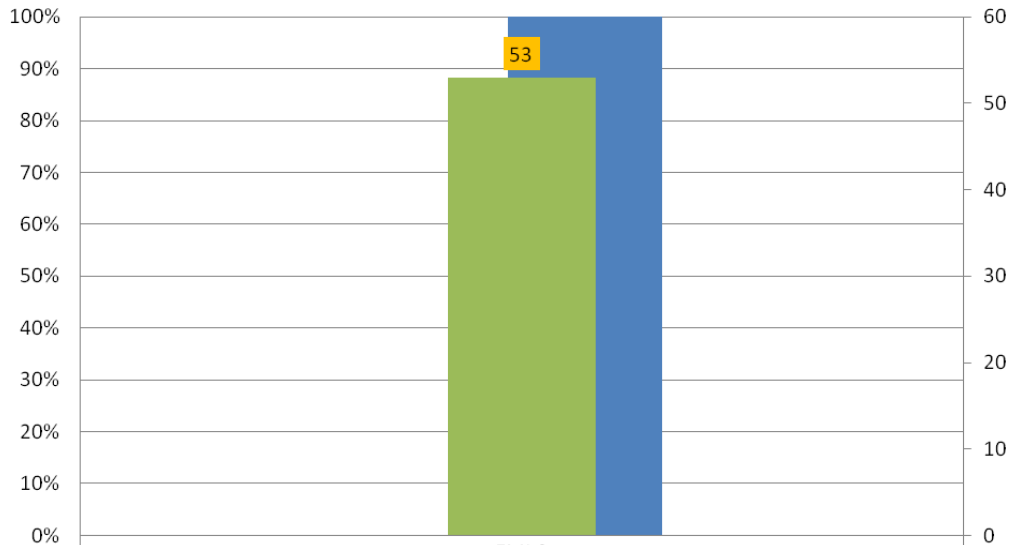
	EMI-2
Non-compliant	0%
Compliant	100%
# of products	53

% of passed checks for EMI1 release and relative updates
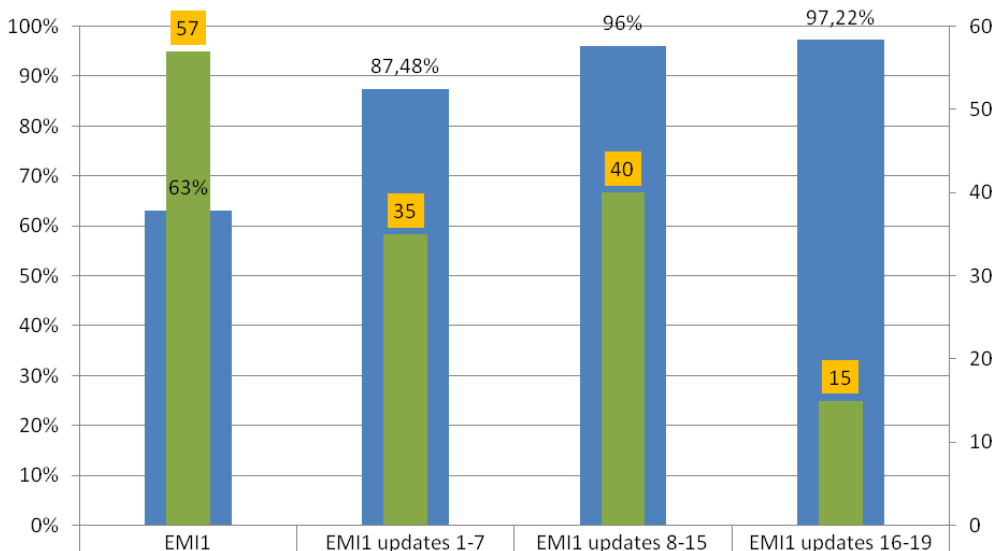
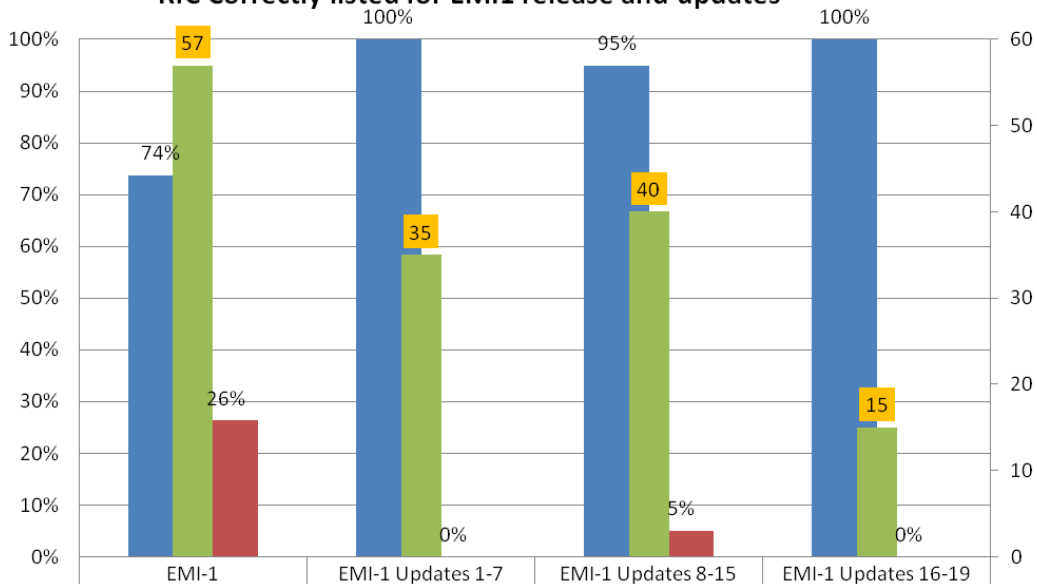|	EMI1	EMI1 updates 1-7	EMI1 updates 8-15	EMI1 updates 16-19
% of passed checks	63%	87,48%	96%	97,22%
# of products	57	35	40	15

% of passed mandatory checks EMI 1 vs EMI 2
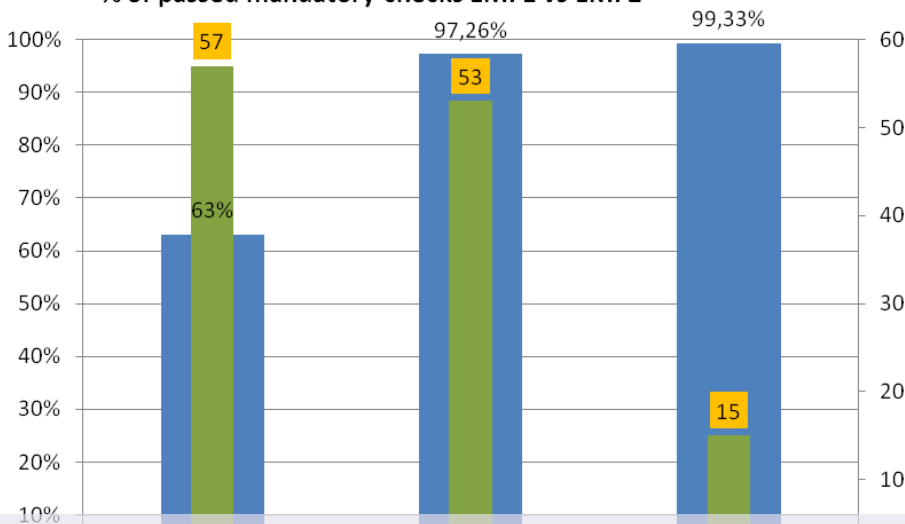
Good improvement of number of passed checks!

	EMI1	EMI2	EMI2 updates 1-3
% of passed checks	63%	97,26%	99,33%
# of products	57	53	15

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RfC Correctly listed for EMI1 release and updates

|	EMI-1	EMI-1 Updates 1-7	EMI-1 Updates 8-15	EMI-1 Updates 16-19
Yes	74%	100%	95%	100%
No	26%	0%	5%	0%
# of products	57	35	40	15

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RfC Correctly listed for EMI 2 and its updates

|	EMI 2	EMI 2 update 1-3
Yes	96%	100%
No	3,7%	0
# of products	53	15
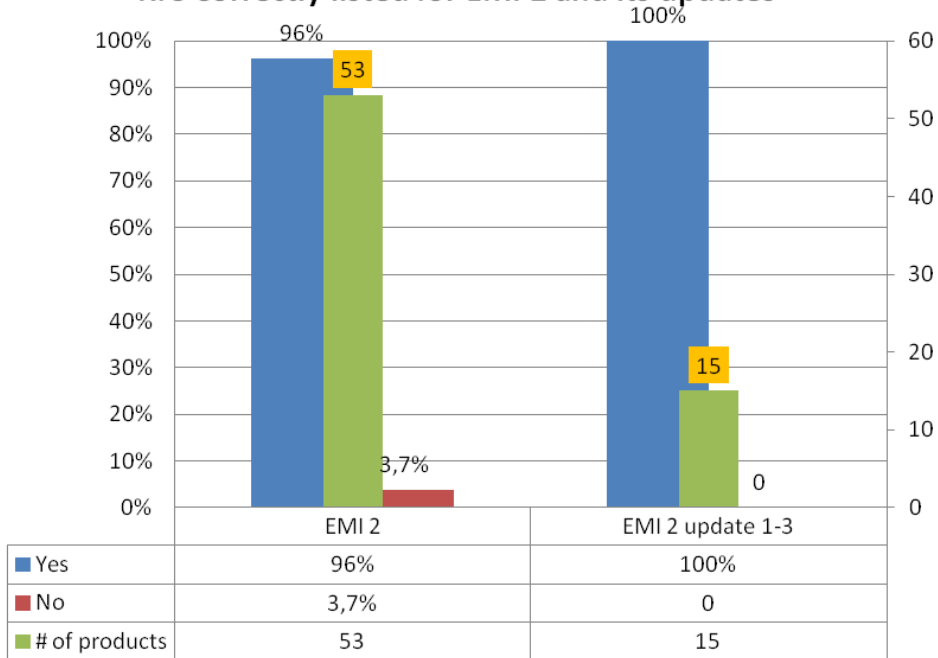
Associated Tests Defects – EMI 1 & 2

Number of Associated Tests for High/Immediate Priority Defects in EMI-1 Major release + Update 1-19

Number of Associated Tests for High/Immediate Priority Defects in EMI-2 Major release + Update 1-3
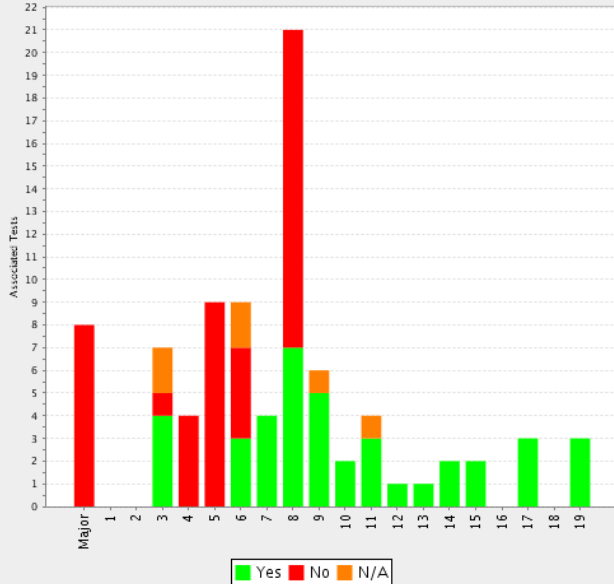
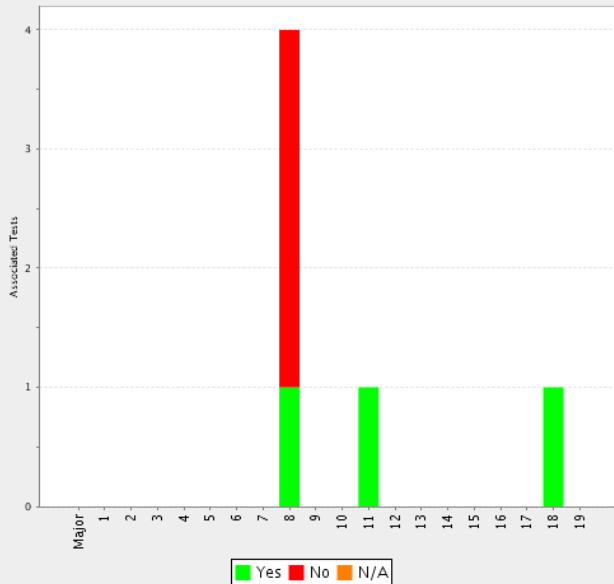EMI 1 release 9-19 show complete enforcement of SA2.2 policies, paramount for EMI reviews
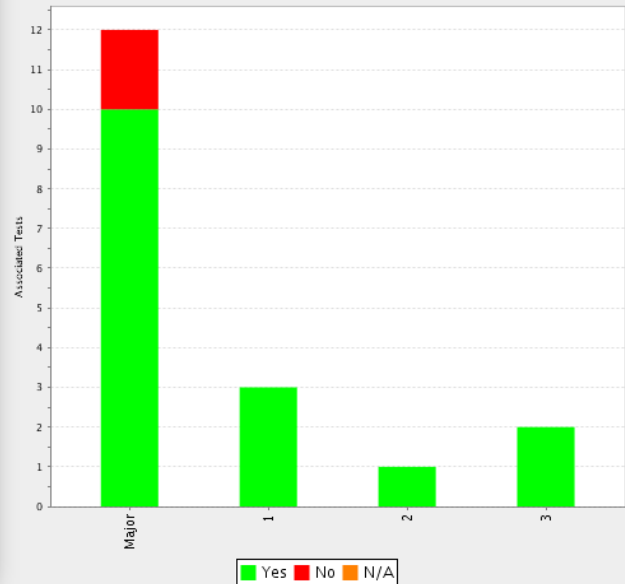
EMI 2 release 1-3 show complete enforcement of SA2.2 policies, 2 issues in EMI 2 Major Release
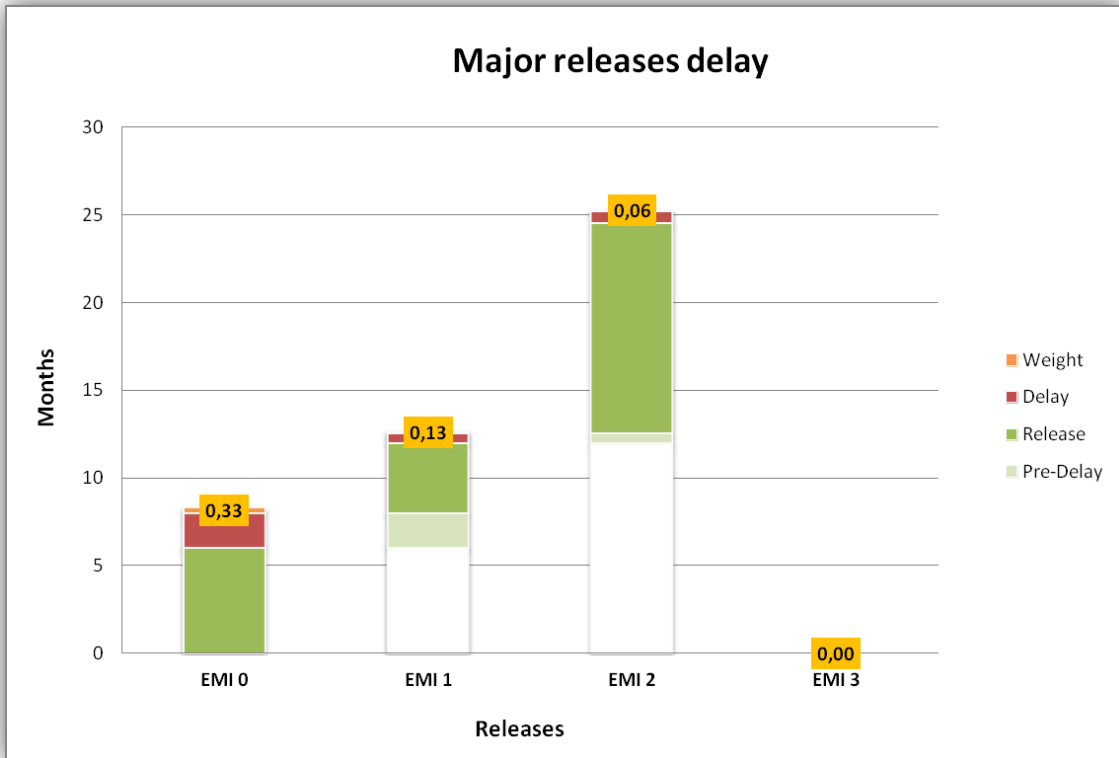
Number of Associated Tests for High/Immediate Priority Features in EMI-1 Major release + Update 1-19

Number of Associated Tests for High/Immediate Priority Features in EMI-2 Major release + Update 1-3

Major releases delay

Major releases delay
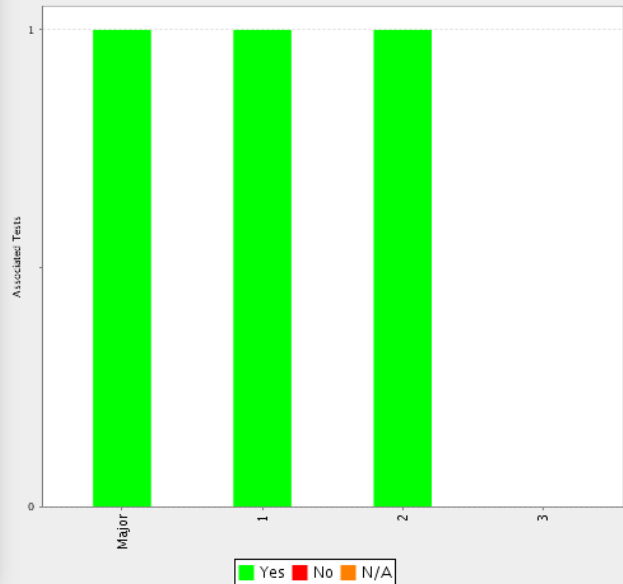
Documentation review

- The results of documentation review are collected in the verification dashboard i.e. they are easily accessible for PTs.

- Common issues:
  - disagreement between information in certification report and actual documentation status
  - some of PTs do not provide the documentation in appropriate format (EMI project logo is missing, formatting of document, …)
  - in some cases a lack of the effort to correct documentation incidents

QC Conclusions

- Overall verification results are good
- New developments (e.g. EMI 2) report better performance on test availability than previous ones (e.g. EMI 1 Updates)
- Level of conformity with EPEL policy is increasing slowly **despite the final goal (100%) is within our grasps**
- Number of defects per quarter is decreasing over quarters

Number of Defects per Quarter (per Priority)

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Thank you!