SA2 - Quality Control – Task 2.7

Giuseppe Fiameni (CINECA)
SA2 Quality Control
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Agenda

- Security Assessment activity
- Verification of software components (EMI 1 Updates)
- Conclusions
- Next steps

Security assessment activity

Components to access

gLite

- VOMS Admin 2.0.18
- Argus 1.2
- gLexec 0.8
- VOMS Core 2.0.2
- CREAM: Computing Resource Execution And Management
- WMS: Workload Management System

UNICORE

- TSI (Target System Interface)
- Gateway

- Activity carried on by Universitat Autònoma de Barcelona
- Last release of the security assessment plan available on the EMI wiki under SA2 Task 2.7 page [1]

[1] https://twiki.cern.ch/twiki/bin/view/EMI/TSA27#Security_Assessment_Activity

Security assessment activity

Progress status

gLite

- VOMS Admin 2.0.18 - **DONE**
- Argus 1.2 - **DONE**
- gLexec 0.8 – **DONE**
- VOMS Core 2.0.2 – *On-Going*
  - ✓ Started: May 2011
  - ✓ Expected duration: 6 months
- CREAM: Computing Resource Execution And Management
- WMS: Workload Management System

UNICORE

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How do we verify products?

- Release manager communicates us the release scheduled during EMT meetings

- A new task for each group of components that need to be verified is created within SA2 tracker (Savannah)

- The former task is assigned to one member of Quality Control team

- As soon as products get certified, a notification email reaches the QC team

- The member in charge of doing the verification for those products opens all corresponding Savannah tasks and the game begins ;)

How do we verify products? (2)

- Any product's material (certification report, test report, test plan) is checked against Production Release Criteria (http://goo.gl/hlNFe)

- If any, non conformities are reported in task's comments and PTs asked to provide clarifications

  - *Major non conformities (i.e. lack of a binary package) block the verification process; products are moved back from "certified" to "open"*

  - Minor non conformities do not block the verification process but PTs are requested to provide clarifications

How do we verify products? (3)

- Any product's material (certification report, test report, test plan) is checked against Production Release Criteria (http://goo.gl/hlNFe)

- If any, non conformities are reported in task's comments and PTs asked to provide clarifications

  - *Major non conformities (i.e. lack of a binary package) block the verification process; products are moved back from "certified" to "open"*

  - Minor non conformities do not block the verification process but PTs are requested to provide clarifications

How do we verify products? (4)

- 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 a possible response for them
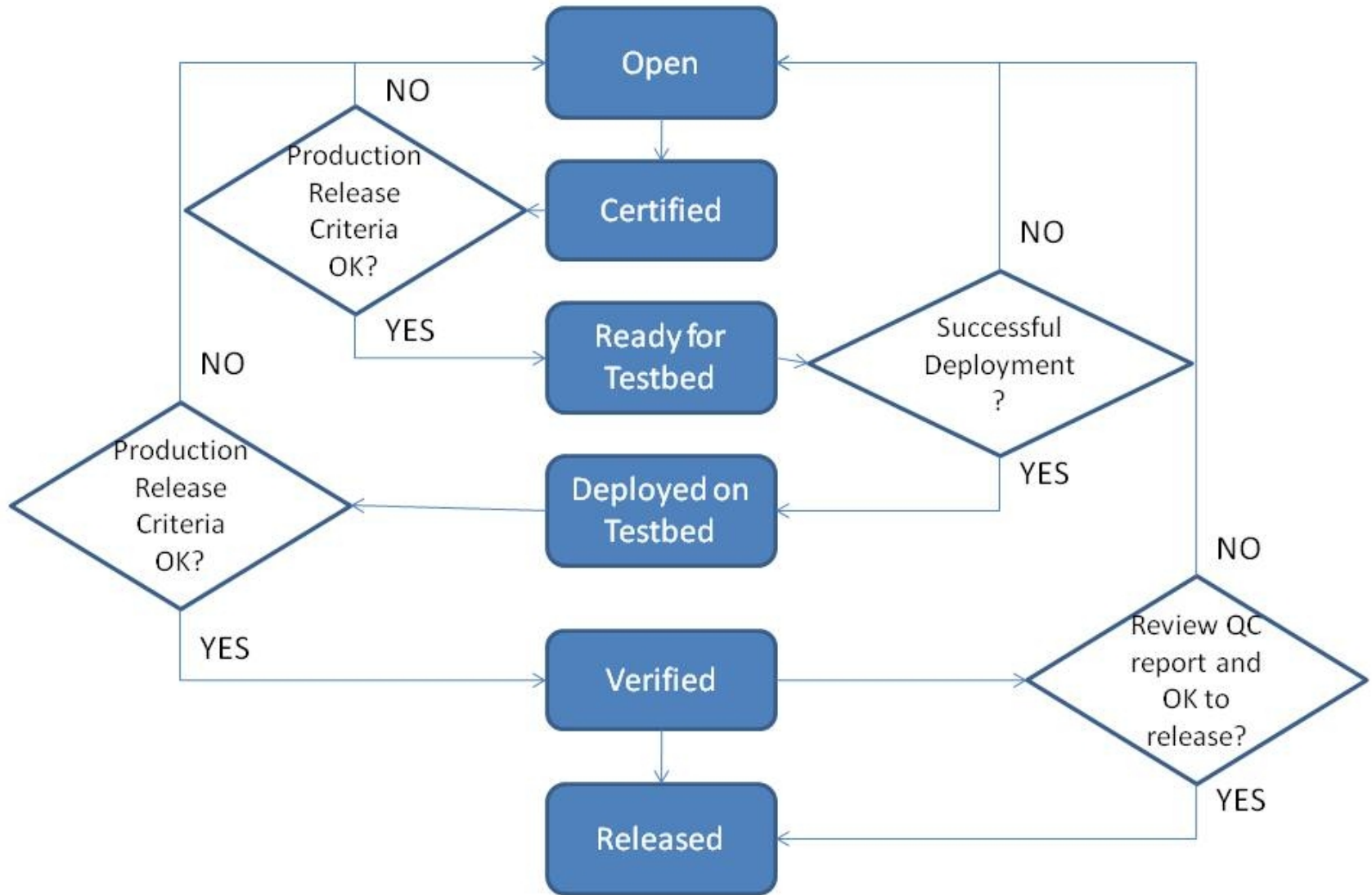
EMI 1 Release

- **53** products **released**

- **48** products **certified**

- **3** products not certified, **nor released**

- **5** products not certified, but **released**

- **57** products **verified**

- **39** products **not fully compliant**

- **16** products **highly compliant** (many *checks marked with Yes*)

- **2** products **fully compliant** (*all checks marked with Yes*) 3.50%

From EMI 1 to EMI 1 Updates

- New Release Task state transition process adopted
- Tasks are moved from **Certified** to **Ready for Testbed** if *Production Release Criteria* are meet. During this transition, minor issues are communicated to PTs
- While products are deployed on Testbed, PTs can fix their tasks according to former QC feedback
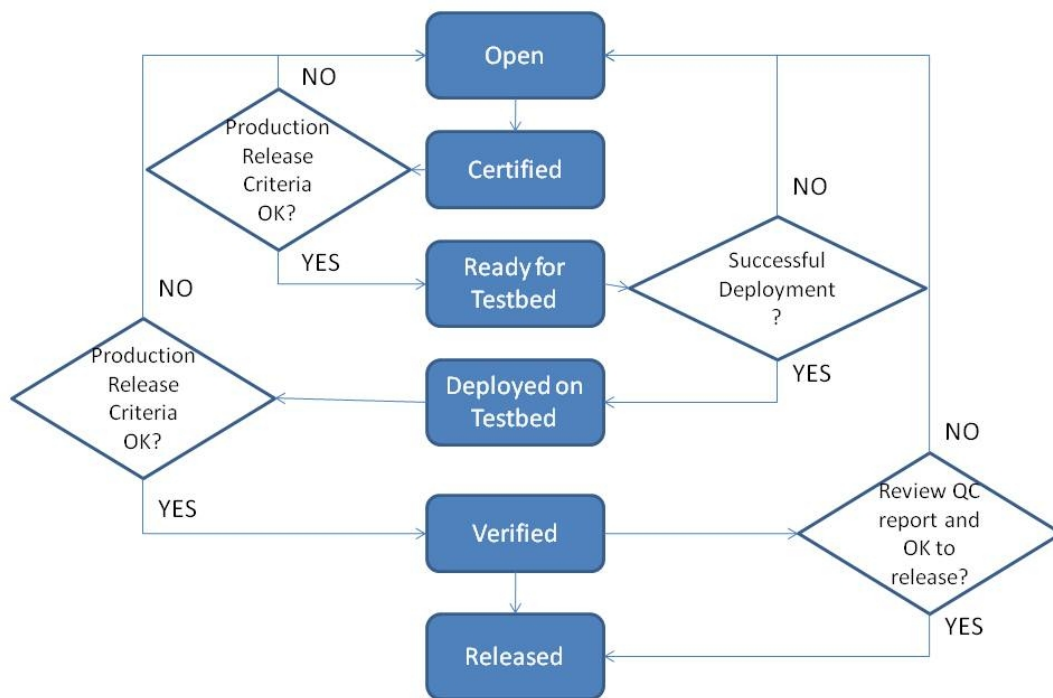
State transition process

EMI 1 Updates (from 1 to 7)

- **35** products **released**
- **33** products **fully verified**
- **2** products released, but **<u>not fully verified</u>**
- **2 products** put back to **Open**
- **20** products **highly compliant**
- **5** products **fully compliant** (*all checks marked with Yes*)
- **15** products **not fully compliant**
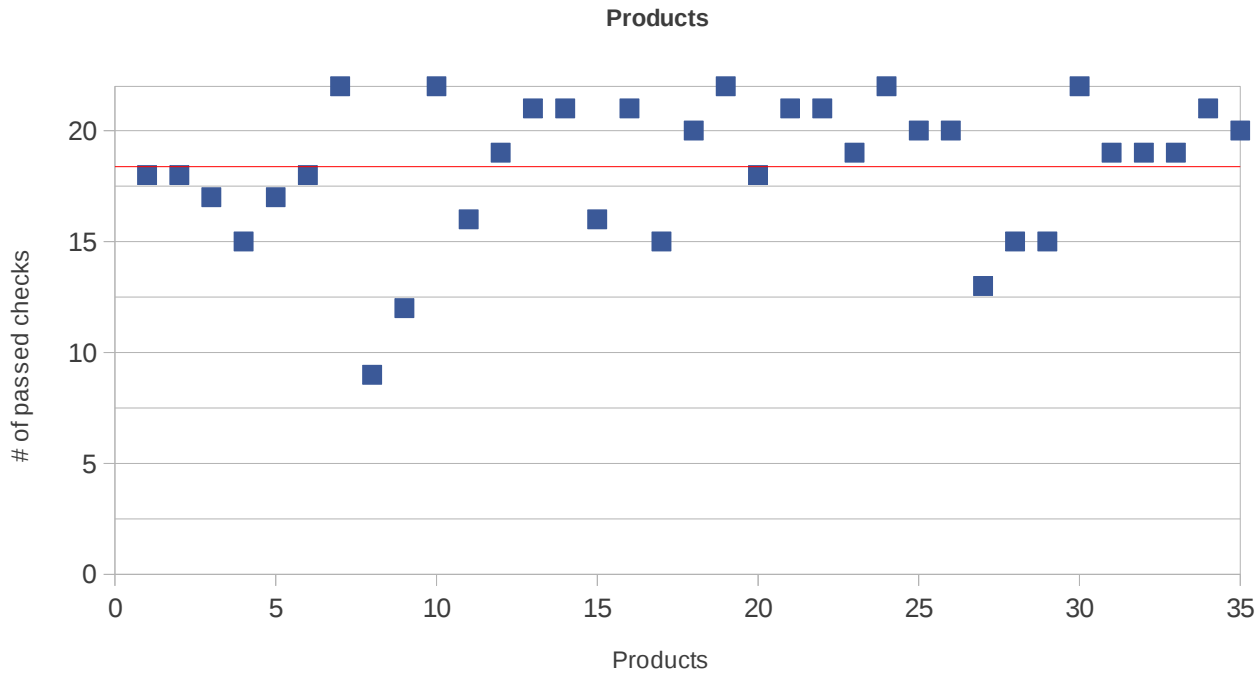- **12 products** postponed on the release schedule
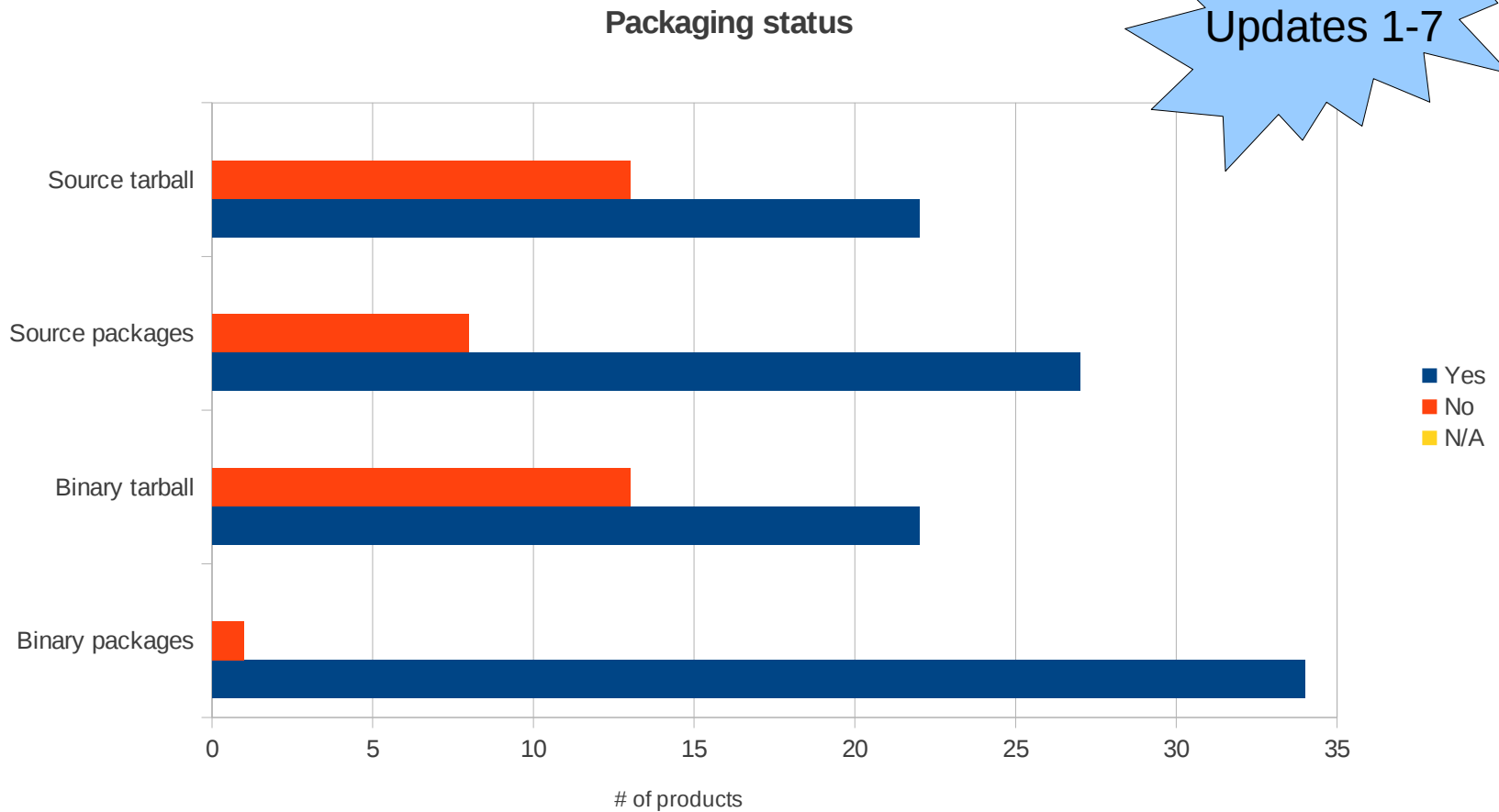
Passed check distribution
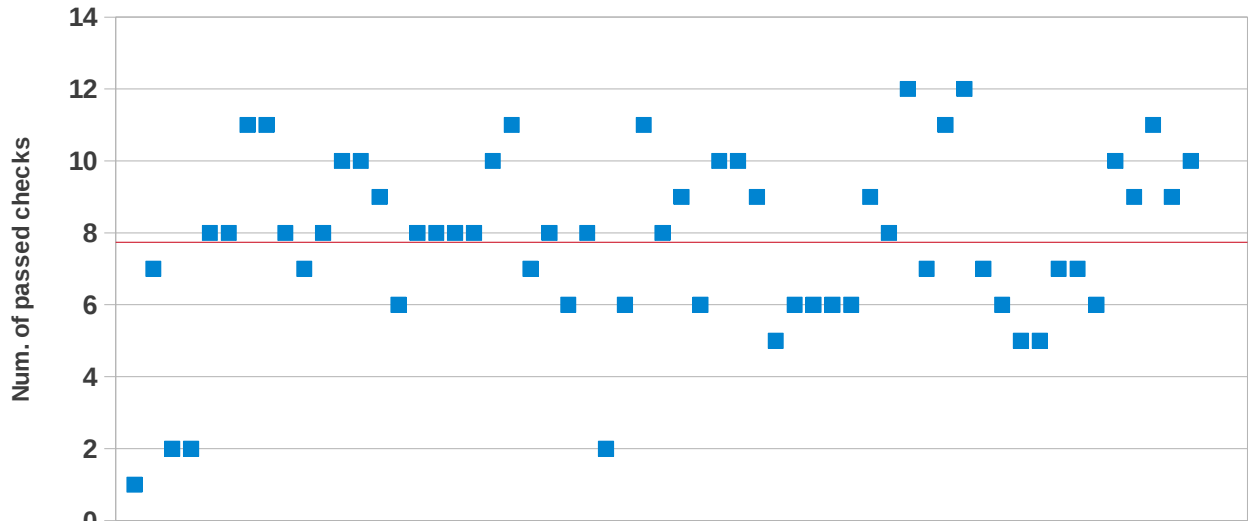
EMI 1
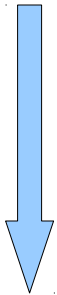
EMI Updates

5 starts products

- Argus 1.4.0
- BDII core 1.1.0 (v1.0.2)
- FTS 2.2.6
- L&B 3.0.12
- UNICORE UVOS 1.4.2

Verification activity numbers

Packaging status

Legend:
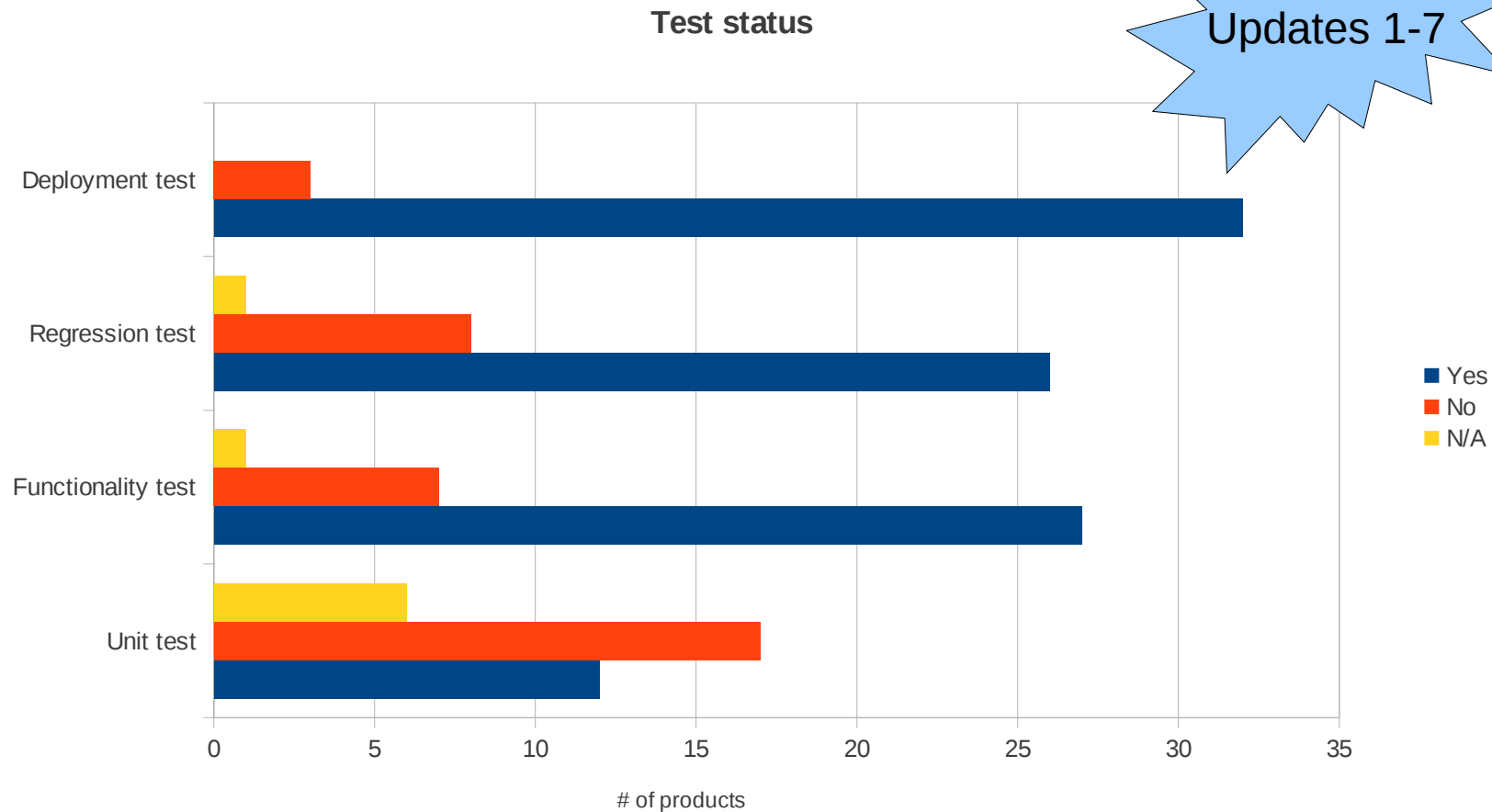- ■ Yes
- ■ No
- ■ N/A

# of products

Availability of software packages

Verification activity numbers

Test status

EMI 1
Updates 1-7

Legend:
- Yes (dark blue)
- No (orange/red)
- N/A (yellow)

# of products

Availability of tests

General comments

- Overall better results have been observed

- Verification process has significantly improved as well as the degree of compliance of released products

- The new release process permits to better interact with PTs and not block the verification activity if minor issues are discovered

- PTs seem to have correctly understood quality policy

- Number of *conflicts* between QC and PTs has significantly reduced

- QC approach can now become progressively more rigours

General comments

- Software packages are not always linked to respective tasks

- ETICS configurations often result unlocked (minor issue, the verification process is not stopped in this case)

- The lacking of Unit and Regression tests causes most of non conformities

- Reports often do not comply with defined templates

- **The adoption of the dashboard will make verification less flexible!**

Remarks on test

General remarks

Five hints to pass the verification

- Be collaborative!
  - Many problems come from misunderstandings, lack of information...
- Use template to create your reports
- Provide explanation why any mandatory information is missing or marked as N/A
- Do not spread information across different documents. We won't look at them!
- Write more tests ;)

- Security assessments tracked in SA2 Tracker

- Security Training (TBD)

- Verification of future tasks done through the new dashboard

- Code test metrics provided by SA2.3

Code test metrics report

- RPMlint

  (to check common errors in RPM packages)

After each update

- Number of Test Plans
  (**https://twiki.cern.ch/twiki/bin/view/EMI/QCTestPlan**)
- Number of Test Reports per released product
- Number of Mandatory Tests per released product
- Number of RfCs with regression test
- Number of RfCs/Development tasks with functionality tests
- Number of passed checks

Questions/issues/improvements

- How do we demonstrate that QA work is really improving products' quality?
  - *PTs' primarily interest is to decrease bugs*
- Schema for Certification/Test reports
- One cert/test report covering all platforms?
  - Why not, but what's about the dashboard?
- Update release on 4-weeks basis
  - How much time do we reserve to analysis QA reports then?
  - How do we track quality RfC?
- Naming policy for test names

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Thank you

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