

EE21 Steering Committee, Geneva, 12-13 November 2013



# State of the Art of the ATLETE II project

## update November 2013

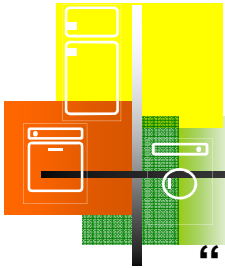
Milena Presutto



UTEE – Technical Unit Energy Efficiency



Co-funded by the Intelligent Energy Europe  
Programme of the European Union



# The „ATLETE II“ project



“ATLETE II”: Appliance Testing for Washing Machine  
Label & Ecodesign Evaluation

11 partners from 8 Member States:

- Italy: ISIS (co-ordinator), ENEA
- Austria: AEA
- Czech Republic: SEVEN
- EU (Belgium): CECED, ECOS, ECEEF
- France: ADEME
- Germany: UniBonn
- Sweden: SWEA
- UK: ICRT

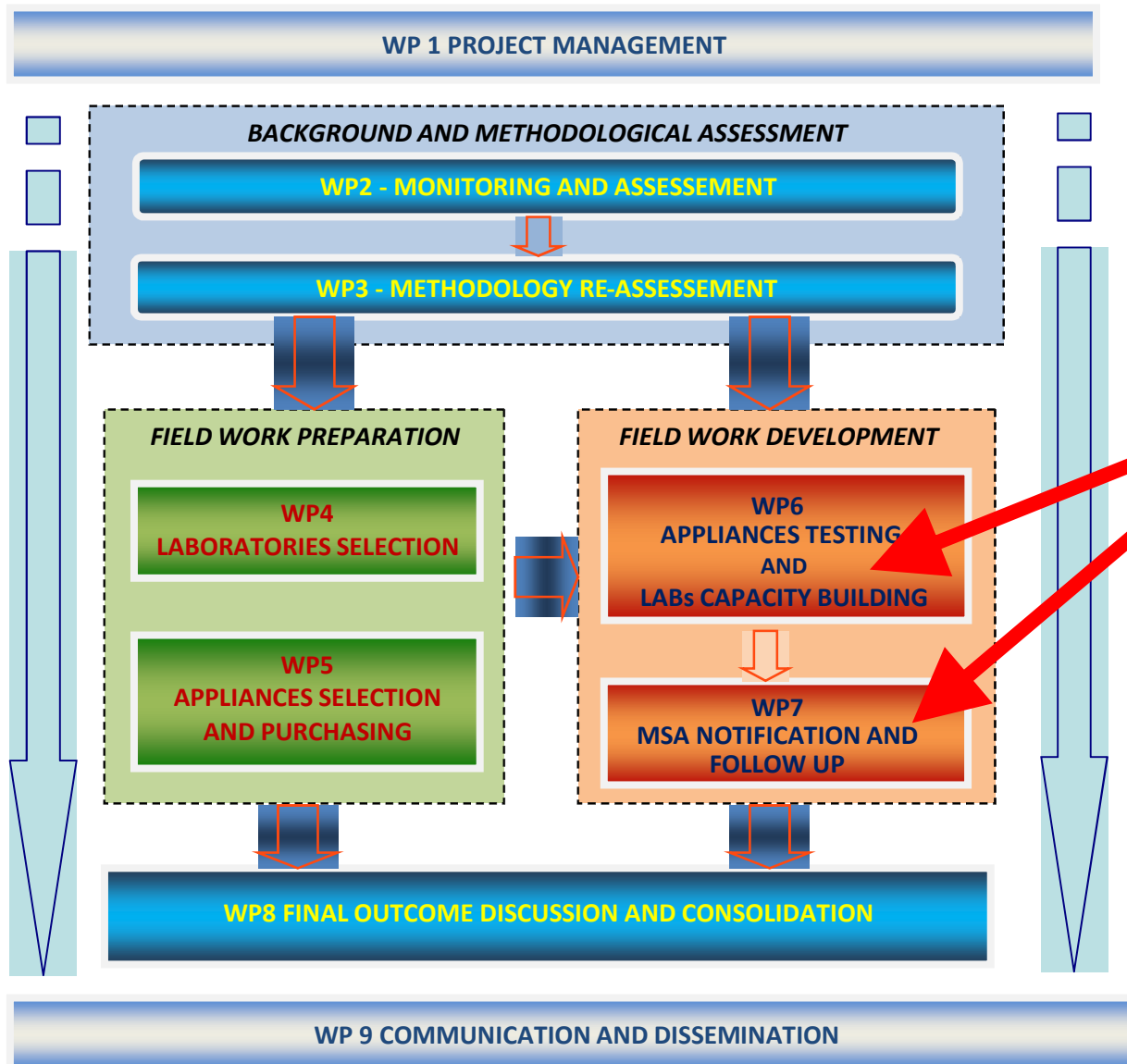
Duration: 30 months (01/05/2012 – 30/04/2015)

EC/partner financing input: 1.193.310,00 €

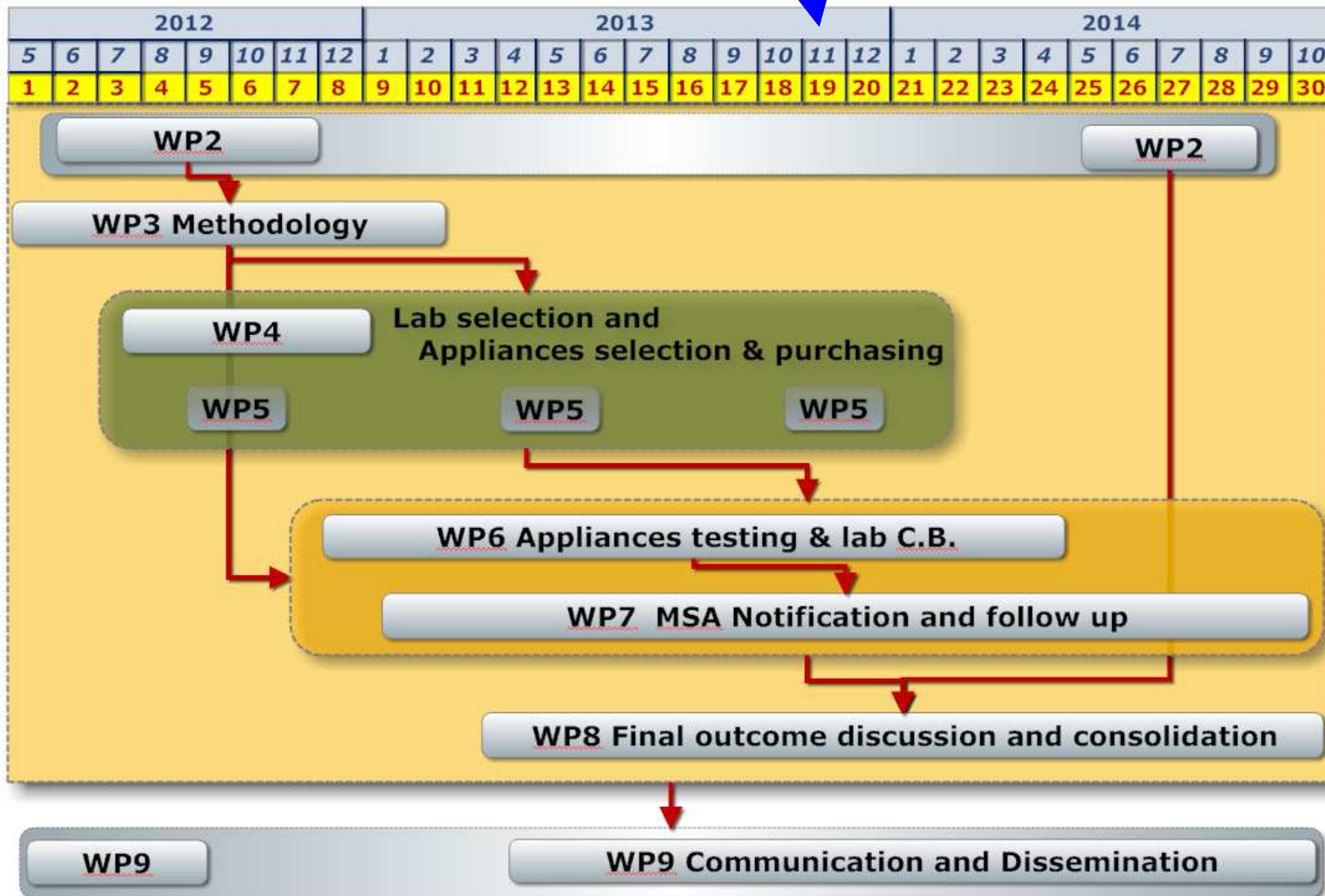
EE21  
sub-regional project

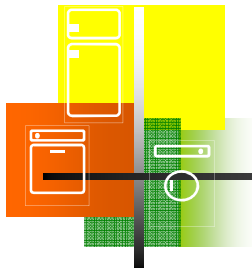


# ATLETE II project structure



# ATLETE II project timetable

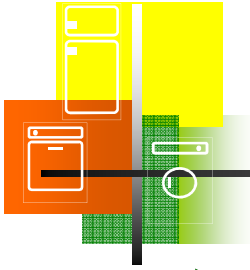




## The „ATLETE II“ project goals

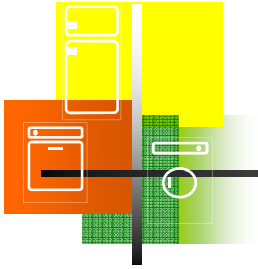
### **Enhance and further promote the effectiveness of the EU energy labelling & ecodesign measures through:**

- identifying examples of effective enforcement of EU labelling & ecodesign legislation and national market surveillance
- further addressing the issue of the feasibility and affordability of verification compliance testing on a new product
- further upgrading and sharing of the verification procedure including the laboratories & appliance models selection
- providing the European Commission and Member States national Market Surveillance Authorities with results of pan-European testing of washing machines
- raise National Authorities' awareness of the effectiveness of the energy labelling and ecodesign on national energy efficiency.



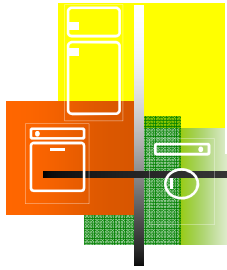
## Main objectives (1)

- ▶ Carry out a pan-European assessment of the compliance of ~ **50 models of washing machines** with EU energy labelling & ecodesign requirements through:
  - ✓ formal compliance (product label & fiche, booklet of instructions)
  - ✓ compliance of the declared values through laboratory measurements (noise excluded)
- ▶ Analyse and evaluate the **uncertain cases**, and make proposals for corrective actions, with the aim to assess:
  - ✓ the reasons for non-compliance, in view of the revision of the washing machine legislation (energy labelling & ecodesign)
  - ✓ the standard applicability, through an in depth analysis of the possible limits/problems of the new test method
  - ✓ the appropriateness of the measurement uncertainty values (tolerances), set in the EU energy labelling & ecodesign Regulations



## Main objectives (2)

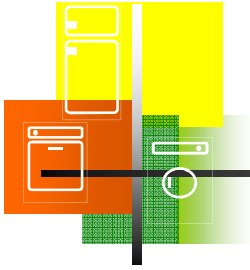
- ▶ Capacity building: improve the know-how and testing capability of a group of laboratories, following the more complex test conditions of the new standard, through a **mini-Round Robin Test**
- ▶ Market Surveillance Authorities notification and follow-up: assess the **actions undertaken by the EU MSA** upon the notification of testing results, especially for non-compliant models
- ▶ NOT under ATLETE II are:
  - check of the technical documentation accompanying products (to be requested by the EU national MSA to suppliers)
  - reason(s) why a MSA is unable to use the test results of another MSA in a different Member State



## Geographical and technical scope

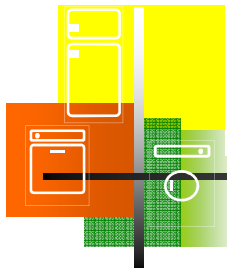
- ▶ Washing machines to be tested are:
  - ✓ automatic, horizontal axis models only
  - ✓ divided into load capacity groups
- ▶ “Semi random” selection procedure: focused on best sold products. Models to be randomly selected, by an external notary, within a shortlist of models including:
  - ✓ the bestseller products for each manufacturer/ producer with a market share above 0,1% on the EU27 market, and
  - ✓ national champions in following countries AT, BE, CZ, DK, FR, DE, IT, NL, PL, ES, SE, UK with market share > 1%
  - ✓ Target: 50 models divided into 3 batches
- ▶ Verification procedure: following the two Steps as established by the EU legislation (1 + 3 units of each model)





## Assessment of WM compliance

- ▶ Actions for non-compliant models:
  - ✓ proven non-compliance will be disclosed immediately to relevant manufacturers and EU Market Surveillance Authorities
  - ✓ after Step 1 of verification: notification to MSA, together with voluntary actions taken by manufacturer to correct mis-declarations and other non-compliances
  - ✓ after Step 2 of verification: notification to MSA for possible decision to start legal actions
- ▶ At the end of the project all test reports and project results will be disclosed to the general public and the media.

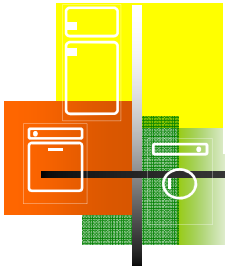


## Application of the new (harmonised) standard

- ▶ (Harmonised) standard is EN 60456:2011 and related standards
- ▶ To evaluate possible areas of uncertainty of its application, to be later discussed with the 6 testing laboratories and with the laboratories involved in the mini-Round Robin Test exercise
- ▶ To create a common understanding and application of the test conditions for washing machines
- ▶ To prepare a set of recommendations for the European Commission, EU standardization bodies, laboratories and stakeholders, on the basis of the field work experience, to improve – if necessary – the usability of the standard.

# Measured parameters and uncertainty

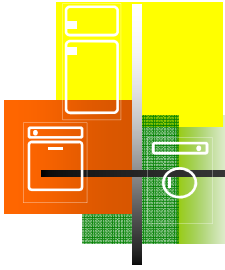
| Harmonised standard: EN 60456:2011                                   | Unit         | Tolerance |        |
|--|--------------|-----------|--------|
|  |              | Step 1    | Step 2 |
| <b>Delegated Regulation 2010/1061/EU and Regulation 2010/1015/EU</b> |              |           |        |
| Annual Energy consumption ( $AE_C$ )                                 | kWh          | 10%       | 10%    |
| Energy consumption ( $E_t$ )   | kWh          | 10%       | 6%     |
| Programme time ( $T_t$ )   | min          | 10%       | 10%    |
| Water consumption ( $W_t$ )  | litre        | 10%       | 10%    |
| Remaining moisture content (D)                                       | %            | 10%       | 10%    |
| Spin speed   | rpm          | 10%       | 10%    |
| Power consumption ( $P_o$ and $P_l$ ) if $> 1W$                      | W            | 10%       | 10%    |
| Power consumption ( $P_o$ and $P_l$ ) if $\leq 1W$                   | W            | 0,1 W     | 0,1 W  |
| Duration of the left-on model ( $T_l$ )                              | min          | 10%       | 10%    |
| Washing performance  | $I_w$        | 4%        | 4%     |
| Water consumption (standard 60°C cotton cycle)                       | litre        | 10%       | 10%    |
| Noise  | NOT measured |           |        |
| <b>Regulation 1275/2008 (standby) NOT verified</b>                   |              |           |        |



## Template for test results reporting

- ▶ To improve readability and comparability of the test results, in order to:
  - ✓ facilitate the final decision on product models compliance
  - ✓ facilitate the statistical analysis of the elementary test results
- ▶ It includes:
  - ✓ elementary measurement results (test results) and calculations
  - ✓ check of the ecodesign minimum requirements & information requirements and of the label & product fiche declarations
  - ✓ a summary table of the compliant/non-compliant parameters
- ▶ Laboratories are filling in the Template with the elementary measurement results and the requested information.

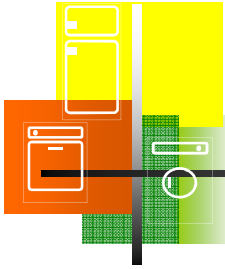
**Done & Validated**



## Test laboratory selection and criteria

- ▶ Outcome: selection of the best laboratories in the EU, irrespective of their country of origin
- ▶ A 'recognition Questionnaire' was circulated, filled in by laboratories and sent back
- ▶ Out of the 20 laboratories initially contacted, 13 replied positively to the invitation
- ▶ 8 laboratories were selected having passed the knock-out criteria and having achieved a defined score
- ▶ Out of them 6 testing laboratories were selected in January 2013, after the visit of two independent experts and a Call for Offer

Done



## The selected laboratories

**CTTN** - France

**IMQ** - Italy

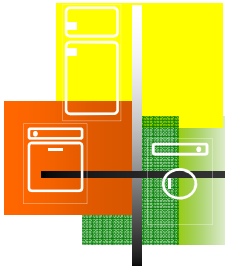
**Intertek** - UK

**LCOE** - Spain

**SLG** - Germany

**VDE** - Germany



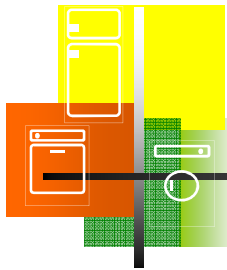


## Washing machine model batches

Models to be tested have been divided into 3 batches:

| market share categories | 1st batch<br>XI 2012 | 2nd batch<br>IV 2013 | 3rd batch<br>IX 2013 | models for<br>random<br>selection |
|-------------------------|----------------------|----------------------|----------------------|-----------------------------------|
| $\geq 10\%$             | 4                    | 8                    | 8                    | 20                                |
| $\geq 5\% < 10\%$       |                      |                      |                      | 9                                 |
| $\geq 1\% < 5\%$        |                      |                      |                      | 10                                |
| $\geq 0,5\% < 1\%$      |                      |                      |                      | 5                                 |
| $\geq 0,1\% < 0,5\%$    | 1                    | 2                    | 3                    | 6                                 |
| <b>TOTAL</b>            | <b>13</b>            | <b>18</b>            | <b>19</b>            | <b>50</b>                         |

Laboratory tests are completed for the 2<sup>nd</sup> batch, i.e. 31 models already tested, 19 still to be done

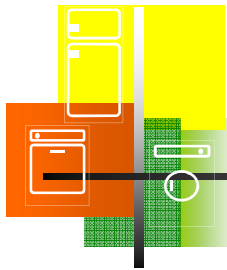


# Washing machine models under test (1)

## Lists of the selected models – 1<sup>st</sup> batch:

| <b>SELECTED MODELS</b>          | <b>AVAILABLE IN EU COUNTRIES</b>   |
|---------------------------------|------------------------------------|
| 1 AEG L77484AFL                 | DE, AT, BE, FI, NL                 |
| 2 BEKO WM622W                   | GB                                 |
| 3 BOMANN WA 9310                | DE, IT, SL                         |
| 4 BOSCH WAQ24461GB              | GB                                 |
| 5 BRANDT WFA1217F               | FR                                 |
| 6 CANDY GOF662                  | GB, IE                             |
| 7 GORENJE WA 70129              | PL, RO, FR, DE, SL, AT, CZ, HU, SK |
| 8 HAIER HNS 1000 A              | DE                                 |
| 9 INDESIT IWD7145               | FR, GB, IE                         |
| 10 LG F1091QD                   | IT, PL, RO, PT, HU, CZ, SK, EL, LT |
| 11 MIELE W 5873 WPS EDITION 111 | DE, AT, BE, EL, SK, CZ, NL         |
| 12 SAMSUNG WF0600 NCW           | PT, LT, LV, EST                    |
| 13 WHIRLPOOL DLC8000            | IT                                 |





## Washing machine models under test (2)

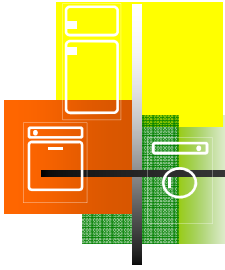
### Lists of the selected models – 2<sup>nd</sup> batch:

| <b>SELECTED MODELS</b>            | <b>AVAILABLE IN EU COUNTRIES</b>   |
|-----------------------------------|------------------------------------|
| 1 AEG LAVAMAT 71470FL             | DE, NL, BE, CZ, AT, LT, LV, SL     |
| 2 AMICA NAVIGATOR PLUS<br>AWN610D | PL                                 |
| 3 BEKO WMI 71641                  | GB, IE                             |
| 4 BOSCH WAQ2832Z                  | DE, AT                             |
| 5 BOSCH WLX20160PL                | PL                                 |
| 6 CONTINENT WM 5100               | DE                                 |
| 7 CYLINDA FT 352                  | SE                                 |
| 8 DAEWOO DWD-NT1011               | ES                                 |
| 9 EDESA ZEN-L8212                 | ES                                 |
| 10 ELECTROLUX-RE RWP 105205W      | IT                                 |
| 11 HOOVER DYN8164D                | GB                                 |
| 12 HOTPOINT-ARIS ECO 8D 1492 K    | FR, BE, PT, NL                     |
| 13 INDESIT IWUD-4105              | PL, IT, CZ, RO, HU, SL, LV, EE, LT |
| 14 LG F1291QD                     | IT, PL, GB, SE, FI                 |
| 15 PANASONIC NA-148VG4WGB         | GB                                 |
| 16 SAMSUNG WM WF1704WSV           | FR, DK, SE, FI, HU, CZ, NL, RO, SL |
| 17 WHIRLPOOL AWE 5105             | DE, AT                             |
| 18 WHIRLPOOL DLC6010              | IT                                 |

## Capacity building: the mini-RRT exercise

- ▶ 3 mini-RRT tiers, for a total of 9 laboratories, were foreseen in the ATLETE II project proposal
- ▶ Contacts with laboratories having submitted the initial recognition Questionnaire but not yet approved for compliance verification testing
- ▶ Each laboratory participates on a voluntary basis, however:
  - ✓ part of the consumable (soil strips and standard detergent component) is covered by the project
  - ✓ transportation expenses (if any) is also in charge of the project
  - ✓ laboratories will use the same Template for reporting test results
  - ✓ 1000 Euro are provided to each laboratory for covering part of the testing time
- ▶ Although it was difficult to attract a sufficient number of laboratories, in the end 5 volunteered to join the exercise.

**started October 2013,  
conclusion January 2014**

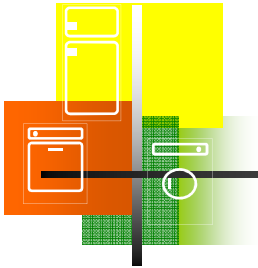


## Communication with MSA

- ▶ According to market data, the 13 first batch machines were sold in 20 countries. The communication about upcoming tests was sent to all 20 national Market Surveillance Authorities

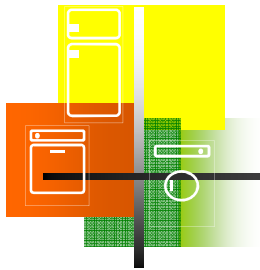


- ▶ 5 MSAs showed a spontaneous interest in tests results.
- ▶ In September 2013, the 20 MSAs got a communication protocol with the summary of the tests for the Batch 1 models available on their market, and the corresponding test results
- ▶ Non-compliance and compliance cases were notified, but so far the notification has not generated major feedbacks
- ▶ The reason(s) not evaluated yet, perhaps MSA have a reaction time slower than project time.



# Project website: [www.atlete.eu](http://www.atlete.eu)

The screenshot shows the homepage of the ATLETE II project website. At the top left is the ATLETE II logo, which consists of the text 'atlete II' in a green, lowercase font, followed by a stylized graphic of a fan or leaf shape in shades of green, yellow, and orange. Below the logo is a red navigation bar with white text for 'HOME', 'PARTNERS', 'NEWS / PRESS', 'CONTACT US', and 'PEC RESERVED AREA'. The main content area is divided into three columns. The left column contains a vertical list of menu items: 'Models & Selection', 'Test Procedures', 'Laboratories', 'Manufacturers', 'Market Surveillance', 'Project Resources', and 'Final Results'. The middle column is titled 'Home' and features the main heading 'Appliance Testing for Energy Label & Evaluation – Washing Machines'. Below this heading are two links: 'Project Overview' and 'Frequently Asked Questions'. The text in this column describes the project's focus on energy labeling and ecodesign of washing machines, mentions the first time in the EU that models will be tested under new Energy Labeling regulations, and notes that the project is co-funded by the Intelligent Energy Europe (IEE) programme. The right column contains a search box with the placeholder text 'Search...' and a 'Search...' button. Below the search box is a 'Latest News' section with a list of five news items, each preceded by a red dot. The items are: 'Atlete II \_ Legislation of Washing Machines', 'Communication protocol', '3.900 recipients of the ECEEE news letter service have been informed about Atlete II', 'ATLETE II project presented at the EEDAL 2013 conference', and 'Summary of EU Legislation on Washing Machines'. At the bottom of the page, there is a footer area. On the left, there is the European Union flag logo and the text 'Co-funded by the Intelligent Energy Europe Programme of the European Union'. Below this is a link for 'Legal notice - European Commission'. On the right, there is a subscription form titled 'To receive the Newsletters please subscribe here:'. It includes input fields for 'Name' and 'E-mail', a checkbox for 'Receive HTML?' which is checked, and a red 'SUBSCRIBE' button.



[www.atlete.eu](http://www.atlete.eu)

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**Thank-you for your attention !**



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