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# IEA-PVPS, Task 15, Subtask C

## International framework for BIPV specifications

### Scope:

- ❑ International definition of »BIPV«
- ❑ BIPV needs & functions analysis
- ❑ BIPV requirements overview
- ❑ Multifunctional BIPV evaluation
- ❑ Suggest topics for exchange between different standardization activities on international level

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# **SUBTASK C**

## **News Item**

### **EN50583 on “Photovoltaics in Buildings”**

- **Published on Jan 16<sup>th</sup>, 2016**
- **Part 1 “BIPV modules**
- **Part 2 “BIPV systems”**
- **Available e.g. as BS EN 50583-1:2016 and BS EN 50583-2:2016**

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# SUBTASK C

## current status

### International definition of »BIPV«

**BIPV** = construction product with photovoltaic functionality.

**Construction product** = defined in the general CPR of the EU:

*‘Construction product’ means any product or kit which is produced and placed on the market for incorporation in a permanent manner in construction works or parts thereof and the performance of which has an effect on the performance of the construction works with respect to the basic requirements for construction works.*

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# **SUBTASK C**

## **current status**

### **Group A: State of the art**

Starting from EN 50583 (2016) and the additional list of requirements from the Japanese delegation, an initial list of requirements has been created that can be then used as a basis for further improvements.

The five mounting position categories of EN50583 were used for this overview

Responsible person: Seiji Inoue

### **Group B: Structural analysis**

This group has identified problems that arise due to the general structure of EN 50583, e.g. disadvantages of the BIPV definition, the five categories Differences between European and international approaches have been listed.

Responsible person: Francesco Frontini

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# **SUBTASK C**

## **current status**

### **Group C: Communication**

To avoid double work, the task of this working group is to communicate our efforts to other standardisation groups. We should be aware of existing standardisation activities as well as be in contact with the most important decision makers and standardisation committees.

Responsible person: Peter Kovacs

### **Group D: Extension**

This group has identified additional needs and requirements for an international BIPV standard that are not yet listed in the overview developed in group A. They have been classified separately for BIPV products and BIPV systems.

Responsible person: Helen Rose Wilson (successor to Wendelin Sprenger)

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# **SUBTASK C**

## **Standards and draft standards reviewed to date**

- ❑ **EN 50583, Parts 1 and 2 (2016) “Photovoltaics in buildings**
- ❑ **ISO 18178 (2015-06-08, TC160) “Laminated solar PV glass” (Japanese response)**
- ❑ **IEC 62980 (2014-09-19) “Photovoltaic modules for building curtain wall applications”**
- ❑ **IEC 82-10-55-NP “Photovoltaics on roof”**

# **SUBTASK C**

## **Reviewed requirements on BIPV products and systems**

- ❑ **Mechanical resistance and stability**
- ❑ **Safety in case of fire**
- ❑ **Hygiene, health and the environment**
- ❑ **Safety in use**
- ❑ **Protection against noise**
- ❑ **Energy economy and heat retention**
- ❑ **Sustainable use of natural resources**
- ❑ **Electrical properties**
- ❑ **Durability/Reliability/Water tightness/Air tightness**
- ❑ **Seismic resistance**
- ❑ **Other (e.g. for bifacial or curved modules)**

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# SUBTASK C

## Next steps

- ❑ Complete and compile results on list of requirements
- ❑ Identify potential for introducing requirements to international standard
- ❑ Establish contact to TC 160
- ❑ Collate experience with implementation of EN 50583



# SUBTASK C: participants so far

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