

**TAL
TECH**

CCIC ESTONIA

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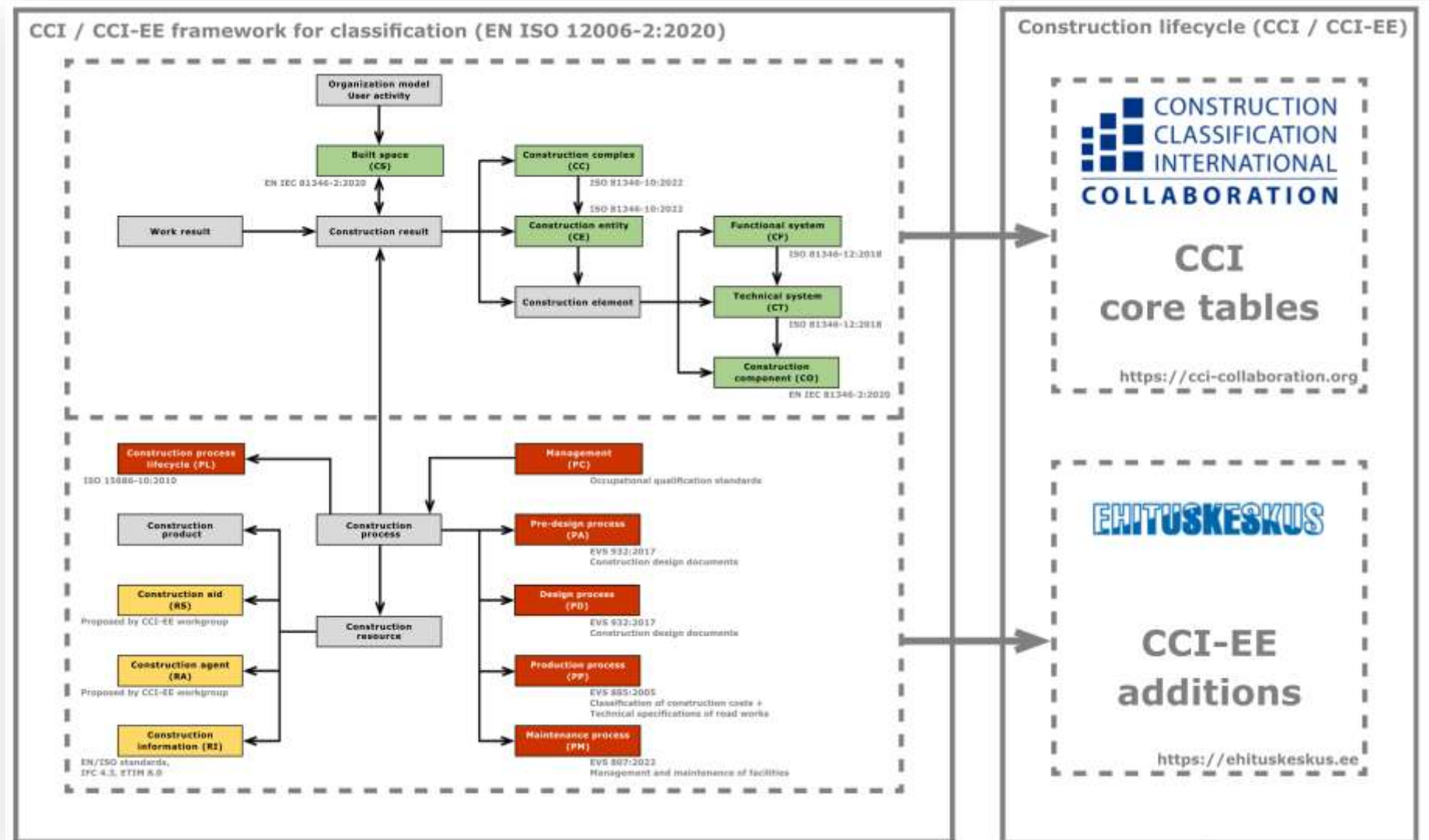
OVERVIEW

- Background
- CCI & CCI-EE
- CCI-EE as the basis of structured data & unique ID
- Pilots

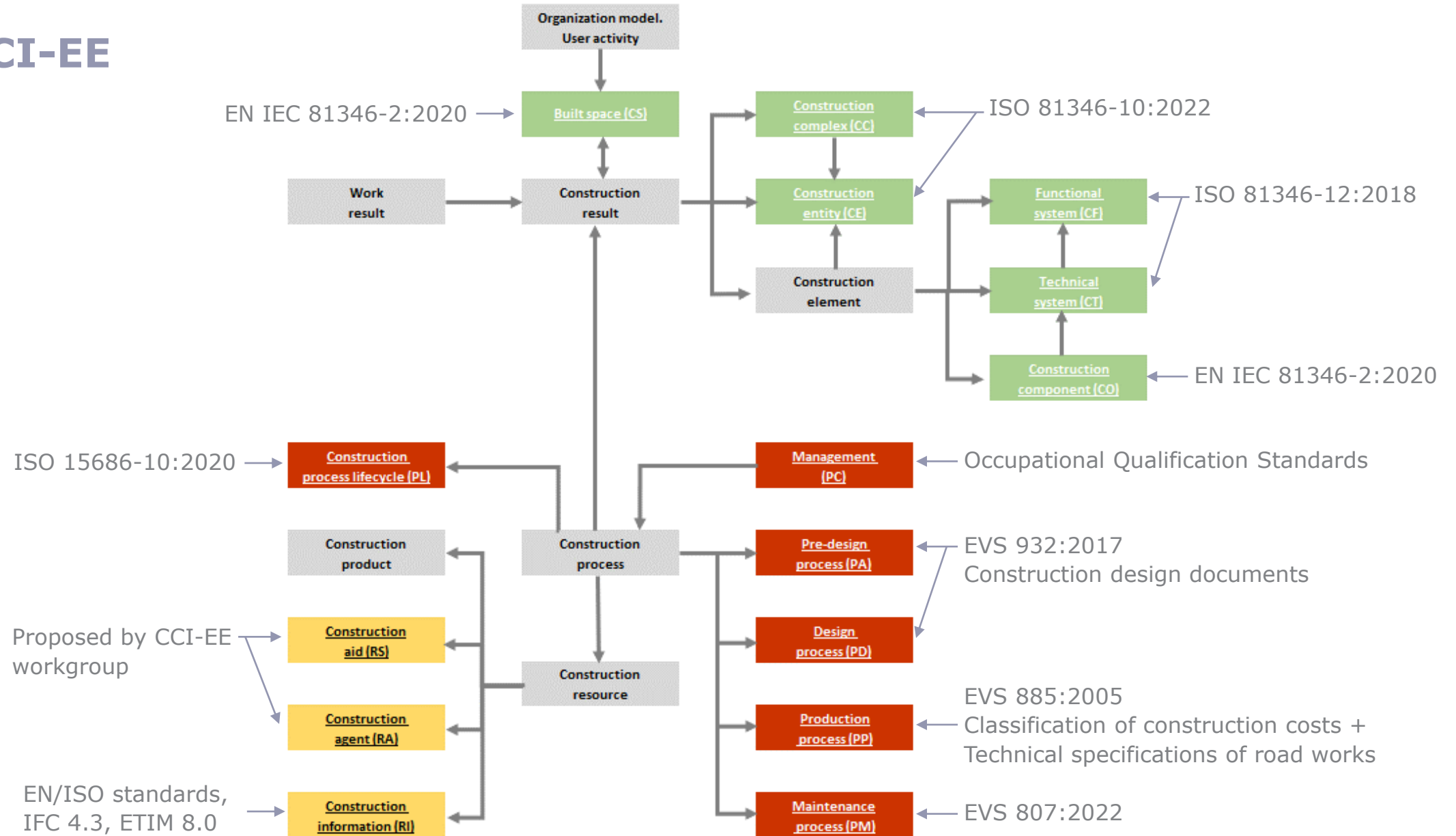
BACKGROUND

- **June 2018:** Ministry of Economic Affairs and Communications announced a procurement to propose a unified construction classification system
- **Summer 2018 – Autumn 2020:** TalTech, TTK University of Applied Sciences, The Estonian Construction Centre – **CCI core tables + local additions were formed**
- **2021** – CCI-EE Implementation project initiated by Ministry of Economic Affairs and Communications (same team was leading)

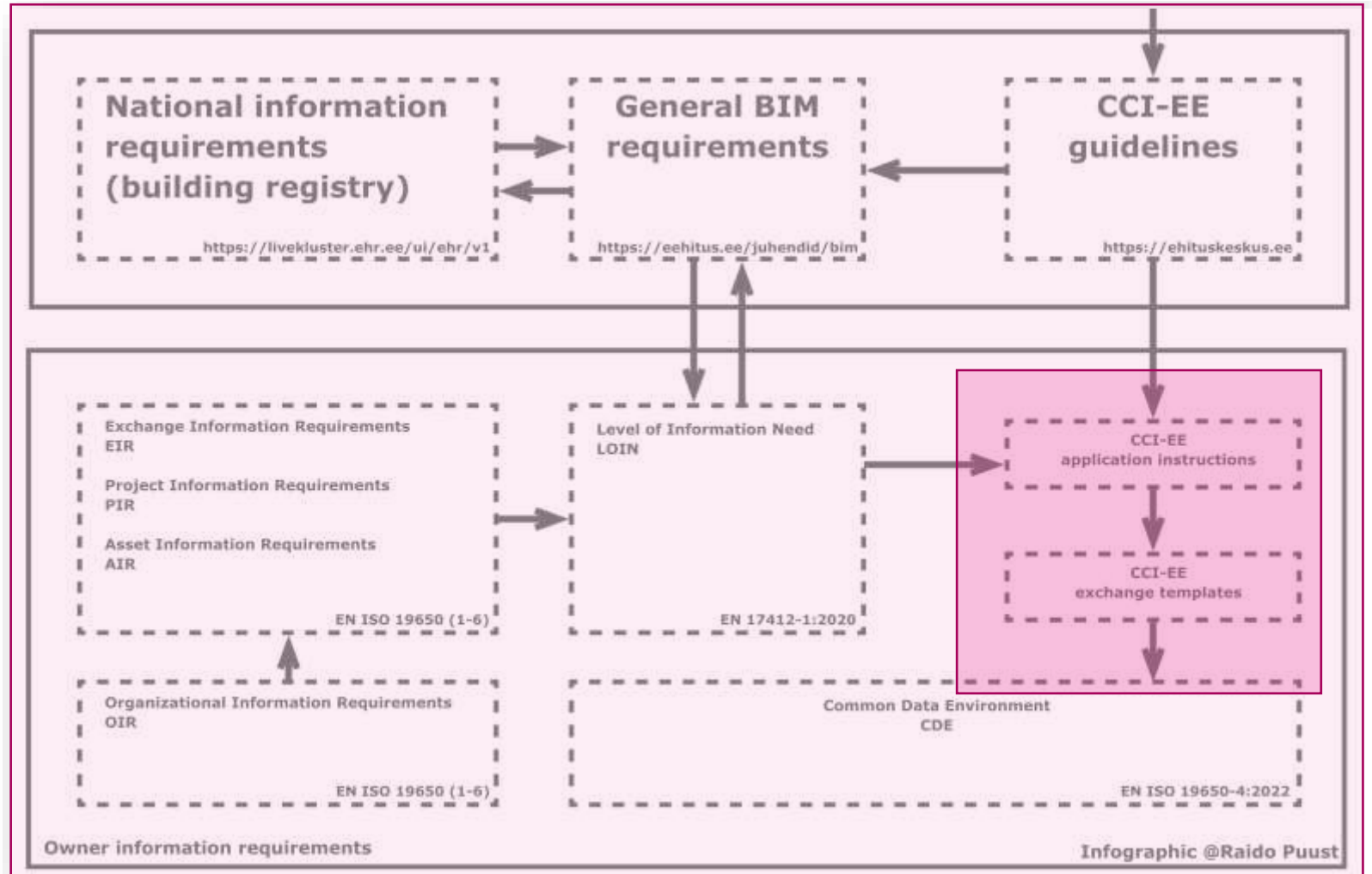
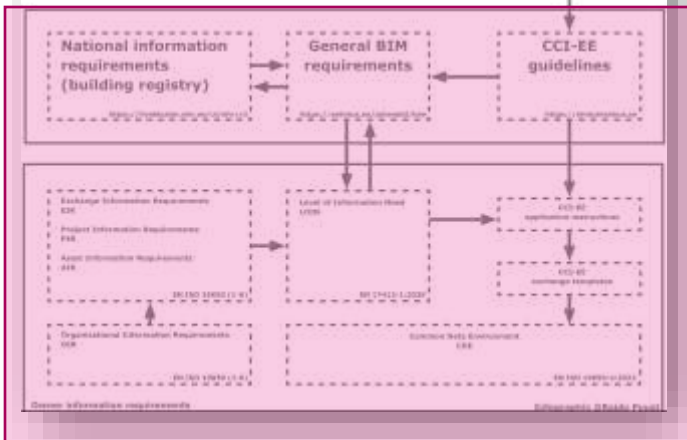
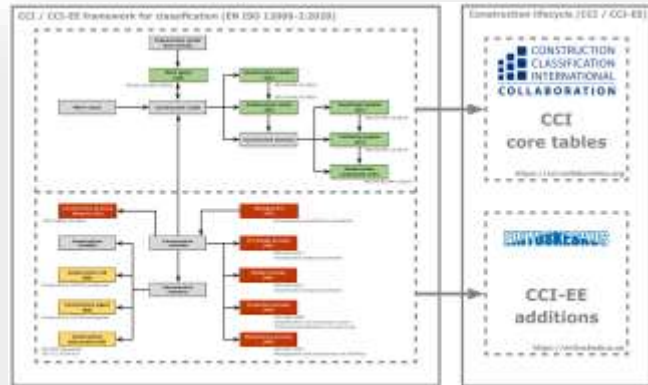
CCI & CCI-EE



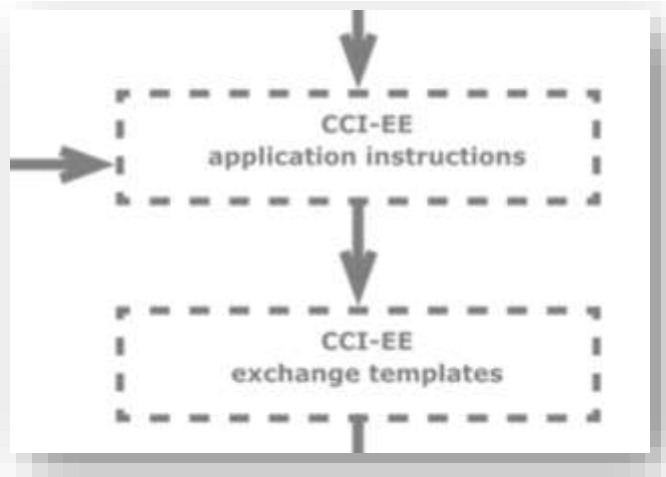
CCI & CCI-EE



CCI-EE: STRUCTURED DATA & UNIQUE ID



CCI-EE: STRUCTURED DATA & UNIQUE ID



CCI-EE context

Introduction (CCI-EE)

CCI-EE and a unique ID

Example: Classification of a building

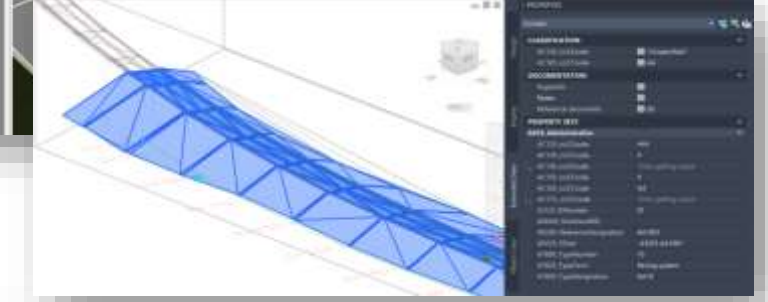
Example: Infrastructure classification

Software specific classification basics

Software templates

Source: <https://flowbim.ee/cci-ee-context/>

Identity Data	
Image	
Comments	
Mark	
AC155_ccfCodeInst	
AC180_ccfTermInst	
AC185_ccfCodeInst	
AC170_ccfTermInst	
AC175_ccfCodeInst	QQA
AC180_ccfTermInst	Window
AC125_idNumberInst	03
AMR45_MultiLevelDirInst	
AR200_ReferenceDesignationInst	QQA019:QQA60
AR225_ReferenceDesignationSet...	-81001AD3001:QQA039...
AT800_TypeNumDefInst	60
AT825_TypeTermInst	Fixed window
AT850_TypeDesignationInst	QQA60
Phasing	
Phase Created	Working Drawings
Phase Demolished	None
IFC Parameters	
IFC Predefined Type	
Export to IFC As	
Export to IFC	By Type
ifcGUID	T6h91u017jAnData257...
A1300_IfcClassifierReference...	QQA Window



Autodesk AutoCAD Architecture Autodesk AutoCAD MEP Autodesk Civil 3D	Drawing template (2023 version): CCI-template-ENG-ACAD_CCI-EE-2022.10.0.1.dwt
Autodesk Revit	Project template (2023 version): CCI-template-ENG-Revit2023-InstanceBased-CCI-EE-2022.10.0.1.rte CCI-template-ENG-Revit2023-TypeBased-CCI-EE-2022.10.0.1.rte
	<i>BIM Interoperability Tools, Standardized Data (MS Excel file):</i> CCI-template-ENG-Revit-InstanceBased-BIT_CCI-EE-2022.10.0.1.xlsx CCI-template-ENG-Revit-TypeBased-BIT_CCI-EE-2022.10.0.1.xlsx
	<i>Shared Parameters, Standardized Data:</i> SP_StandardizedData.txt

CCI-EE: STRUCTURED DATA & UNIQUE ID

- CCI-EE & COBie

Identity Data	
Image	
Comments	
Mark	
AC155_cciCodeInst	
AC180_cciTermInst	
AC165_cciCodeInst	
AC170_cciTermInst	
AC175_cciCodeInst	QQA
AC180_cciTermInst	Window
A1125_IDNumberInst	05
AM945_MultiLevelInst	
AR200_ReferenceDesignationInst	QQA03%QQA60
AR225_ReferenceDesignationSet...	-B1001.AD3001.QQA03%
AT800_TypeNumberInst	60
AT825_TypeTermInst	Fixed window
AT850_TypeDesignationInst	QQA60



Phasing	
Phase Created	Working Drawings
Phase Demolished	None

IFC Parameters	
IFC Predefined Type	
Export to IFC As	
Export to IFC	By Type
IdGUID	148y7u017yAnDataZ57...
A1300_IfcClassificationReference...	QQA Window

Identity Data	
Image	
Comments	
Mark	
A1125_IDNumberInst	05
AM945_MultiLevelInst	
AR200_ReferenceDesignationInst	QQA03%QQA60
AR225_ReferenceDesignationSet...	-B1001.AD3011.QQA03%



Phasing	
Phase Created	Working Drawings
Phase Demolished	None

IFC Parameters	
Export Type to IFC As	
Export to IFC	By Type
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Head Height	2700.0

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QQC20	jusmid@	2022-11-2	QQC20	Lükanduks	n/a	NorDan	ND NTecl	n/a	n/a	n/a	n/a	n/a	AutlfcDoor	QQC20	n/a	
QQC10	jusmid@	2022-11-2	QQC10	Hingedega	n/a	SWEDOO	Function	n/a	n/a	n/a	n/a	n/a	AutlfcDoor	QQC10	n/a	
QQC10	jusmid@	2022-11-2	QQC10	Hingedega	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	AutlfcDoor	QQC10	n/a	
QQC10	jusmid@	2022-11-2	QQC10	Hingedega	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	AutlfcDoor	QQC10	n/a	
BF20	jusmid@	2022-11-2	BF20	Aluspõran	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	AutlfcSlab	BF20	n/a	
BF10	jusmid@	2022-11-2	BF10	Valatud põ	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	AutlfcSlab	BF10	n/a	
AF30	jusmid@	2022-11-2	AF30	Massiivtre	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	AutlfcSlab	AF30	n/a	
AF30	jusmid@	2022-11-2	AF30	Massiivtre	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	AutlfcSlab	AF30	n/a	
AH30	jusmid@	2022-11-2	AH30	Väljaulatu	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	AutlfcSlab	AH30	n/a	
AH30	jusmid@	2022-11-2	AH30	Väljaulatu	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	AutlfcSlab	AH30	n/a	
AE20	jusmid@	2022-11-2	AE20	Taladel ka	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	AutlfcRoof	AE20	n/a	
AD30	jusmid@	2022-11-2	AD30	Seinakons	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	AutlfcWall	AD30	n/a	
BB30	jusmid@	2022-11-2	BB30	Sokli vund	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	AutlfcWall	BB30	n/a	
AD30	jusmid@	2022-11-2	AD30	Seinakons	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	AutlfcWall	AD30	n/a	
AD30	jusmid@	2022-11-2	AD30	Seinakons	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	AutlfcWall	AD30	n/a	
AD30	jusmid@	2022-11-2	AD30	Seinakons	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	AutlfcWall	AD30	n/a	

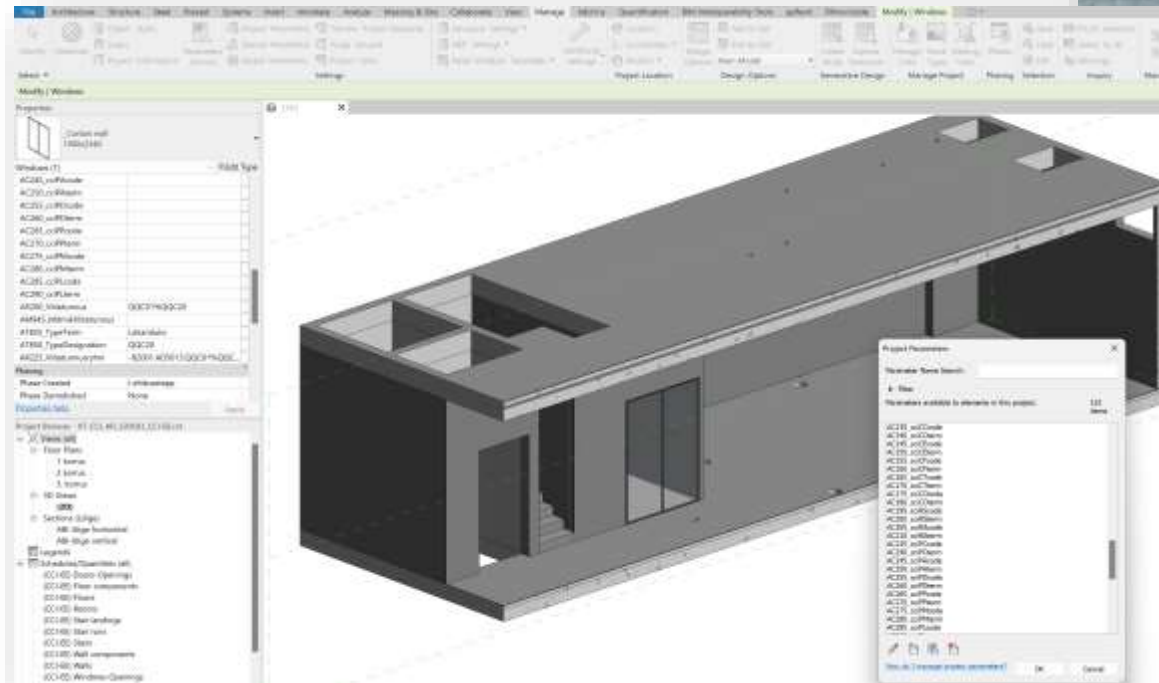
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IFC Parameters	
Export Type to IFC As	
Export to IFC	By Type
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A1300_IfcClassificationReference...	QQA Window



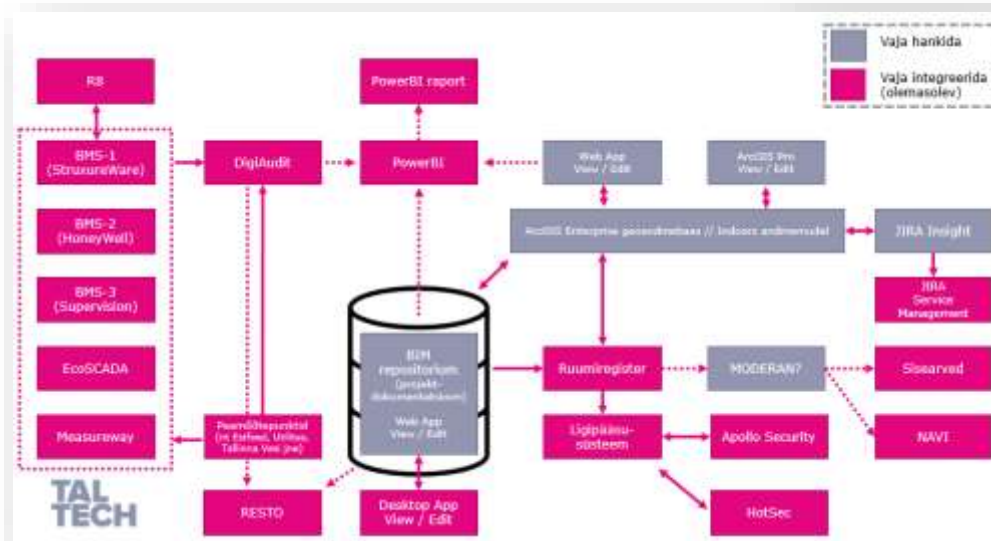
PILOTS (1)

- Cruise terminal



PILOTS (2)

- TalTech Campus buildings
 - existing condition BIM models (modeled through a survey data + construction drawings) (with CCI-EE codes/types/ID values)
 - integration pilots with current IT-systems using CCI-EE unique ID concept (focus to room register, IoT sensors)



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