THE R2S PRINCIPLES

A BASIS FOR BUILDING CONNECTIVITY, A PREREQUISITE FOR ITS ABILITY TO COMMUNICATE

The ability to route wired and/or radio connections to and inside the building is the first link in the chain of connected building services. Given the highly diverse and versatile nature of the services, related to the usage patterns and highly unpredictable medium and long-term development, a high operational flexibility of the links or media supporting the necessary wires is needed in order to adapt to the routing of new wires and thereby meet new connection needs during the life of the building.

POOLED IP NETWORK INFRASTRUCTURE FOR THE COMMUNICATION FLOWS OF THE BUILDING

A robust, secure and scalable intra-building infrastructure is required in order to implement an R2S (Ready2Services) solution based on smooth data flows. Through the implementation of international Ethernet-IP (Internet Protocol) standards, it makes it possible to converge all connected objects of the building towards a federating network and hence promote the pooling of the network infrastructure to ensure optimum efficiency.

TECHNICAL ARCHITECTURE SEPARATED INTO 3 INDEPENDENT LAYERS

This architecture, with its three independent levels, provides a solution to the problem of communication between the systems and the lifecycle of the building. It provides the building with greater flexibility and scalability by separating the applications layer (services), the communication layer (network infrastructure) and the equipment layer (connected equipment). The R2S (Ready2Services) models lays down the standard for interchangeability of each level, without modifying the other two levels so that a service does not require an equipment ecosystem or dedicated network infrastructure and vice versa.

FREE DATA FLOW AND SYSTEM INTEROPERABILITY

With the generalisation of open API (Application Programming Interface) programming interfaces, R2S (Ready2Services) provides free access to the data and services of the building. These API are available in local mode or in cloud mode depending on the services. They are covered by documentation and user licences which are clear and accessible to third parties. By applying these principles, R2S (Ready2Services) does not require specific ecosystems and takes into account the diversity of existing and future solutions, as long as they comply with these rules for open and free data flows.
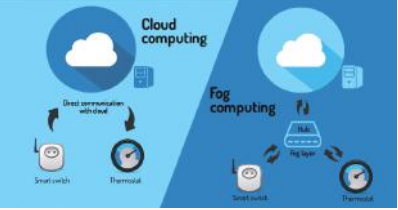
ROBUST DESIGN AT ALL TIMES

Making equipment ecosystems controllable does not obviate the need for equipment to be independent, in other words, the basic features of the equipment and the locally hosted services are still required, with or without internet connection with the outside.
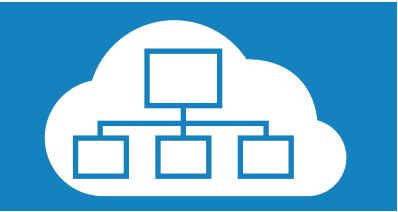
DIGITAL SECURITY AND PROTECTED DATA

Building functions which can be accessed and controlled remotely or from the occupant's Smartphone means that cybersecurity rules need to be taken into account to access the systems: network, connected equipment, services as well as the data protection procedures in compliance with the EU General Data Protection Regulation (GDPR).

THE 3 LAYERS OF THE CONNECTED AND COMMUNICATING BUILDING

"APPLICATIONS/SERVICES" LAYER

Where the building data is stored and processed to provide services to the users (occupant or operator).

"COMMUNICATION INFRASTRUCTURE" LAYER

The network layer of the building where data is transmitted on radio and/or wired medium to the Ethernet-IP (Internet Protocol) standard which makes the equipment accessible to the services layer and vice versa.

"CONNECTED EQUIPMENT" LAYER

Whether it involves sensors, actuators, controllers or connected objects, they must be able to communicate with the upper layer, i.e. the Ethernet-IP (Internet Protocol) network of the building.

THE HONORARY MEMBERS

ABB • ALTAREA COGEDIM • ARTELIA • OUI assystem • axians • barbanel • BNP PARIBAS REAL ESTATE • bouygues

CISCO • Deloitte. • EIFFAGE ENERGIE • ENGIE Axima • ENGIE Ineo • enocean alliance • FAYAT ENERGIE SERVICES • ga SMART BUILDING • GRDF

HSBC • ICADE • idex • iPorta • legrand • LiTED • N neobuild • NXP • orange

PROLOGIS • PICHET • RENESAS • Resolving • Schneider Electric • SFR • SIEMENS • SNEF

GROUPE SNI • SPIE • ubiant • Vertuoz by ENGIE • VINCI ENERGIES • VINCI FACILITIES • WAGO • WIT

THE MEMBERS

ABB • ACCENTA • ACCOR INVEST • ACOME • ACR • ACS2I • ACTIWATT • ADEUNIS RF • AFPA-TOULOUSE • AIRELIOR FACILITY MANAGEMENT • AIRRIA • ALCANTE • ALIAXIS • ALLIANZ REAL ESTATE FRANCE • ALPHA RLH • ALTAREA COGEDIM • ALTECON • ALTERNET • AN2V • APILOG AUTOMATION • ARC INFORMATIQUE • ARCHIMEN • ARCOM • ARISTOTE • ARKHENSPACES • ARP ASTRANCE • ARTELIA • ASCAUDIT • ASSOCIATION HQE • ASSYSTEM • ATC France • AURI ZONE • AVIDSEN • AXIANS • AXXONE SYSTEM • AZUR SOFT • B.TIB • BAALBEK MANAGEMENT • BARBANEL • BCM ENERGY • BEEBRYTE • BG INGENIEURS CONSEILS • BIRDZ • BNP PARIBAS REAL ESTATE • BORDEAUX METROPOLE • BOUYGUES CONSTRUCTION • BOUYGUES ENERGIES & SERVICES • BOUYGUES IMMOBILIER • BOUYGUES TELECOM • CABA • CAE GROUPE • CAILLOU VERT CONSEIL • CAISSE DES DEPOTS • CAPENERGIES • CCI NICE COTE D'AZUR • CDU IMMOBILIER • CEA TECH • CERTIVEA • CISCO • CIT RED • CITYLITY • CLUSTER HBI • CNAM • CONNEK + CONSEIL • CONSEIL DEVELOPPEMENT METROPOLE DE LYON • COSTE ARCHITECTURES • COSTIC • COTHERM • COVIVIO • CR SYSTEM • CSTB • CYMBI.O • CYRISEA • DALKIA • DASSAULT SYSTEMES • DATA SOLUCE • DECAYEUX • DECELECT • DELOITTE • DELTA DORE • DEMATHIEU BARD • DIS INGENIERIE • DISTECH CONTROLS • DOVOP DEVELOPPEMENT • EON • E'NERGYS • EASY SMART BUILDING • ECONOCOM • EDF - BRANCHE COMMERCE • EDF OPTIMAL SOLUTIONS • EFFIPILOT • EGIS CONSEIL BATIMENT • EIFFAGE ENERGIE • ELITHIS • EMBIX • EN ACT ARCHITECTURE • ENERGIE IP • ENERGISME • ENGIE AXIMA • ENGIE INEO • ENLIGHTED • ENOCEAN • ENSEMBL' • ENSI POITIERS • F2A SYSTEMES • FAYAT • FFDomotique • FIFTHPLAY • GA SMART BUILDING • GA2B • GARCIA INGENIERIE • GCC • GEMALTO • GETEO • GETRALINE • GFI INFORMATIQUE • GLI - GROUPE EKIUM • GRAND PARIS HABITAT • GRDF • GREENERWAVE • GROUPE BETOM - IDEAM SOLUTIONS • GROUPE QUALICONSULT • HABITAT 76 • HAGER • HAVR • HENT CONSULTING • HESTIA INNOV • HONEYWELL • HSBC • HXPERIENCE • HYDRELIS • IBM • ICADE • ICONICS • IDEX • ILOGS FRANCE • IMMOBILIERE 3F • IMPERIHOME • INEX • INGETEL BET • INNOVATION PLASTURGIE COMPOSITES • INSITEO • INTENT TECHNOLOGIES • IP2I • IPORTA • ISTA • JOOXTER • KALIMA DB • KARDHAM CONNECT • KEO FLUIDES • KEYCLIC • KOONTOO • KORUS • L'IMMOBILIERE IDF • LEGRAND • LEON GROSSE • LES COMPAGNON DU DEVOIR • LEXCITY • LITED • LM INGENIERIE • LONMARK FRANCE • LUTRON ELECTRONICS • LUXENDI • MBA INGENIERIE • MCS SOLUTIONS • MEDIACONSTRUCT • MICROSENS • MIOS • NEOBUILD • NETISSE • NETSEENERGY • NEXITY • NEXTDOOR • NODON • NOVAL • NXP • OCCITALINE • OGER INTERNATIONAL • OGGA • OPEN MANAGEMENT • OPENFIELD • ORANGE • OTI FRANCE • OVERKIZ • OYA LIGHT • OZE ENERGIES • PARTAGER LA VILLE • PHILIPS LIGHTING • PICHET • PLACE DES ENERGIES • PLAN BATIMENT DURABLE • POLE TES • POLESTAR • POSTE IMMO • PREMIUM CONSEIL • PRESTANTENNES • PRIVA • PROLOGIS • PROMOTELEC SERVICES • PROXISERVE • QARNOT COMPUTING • QOS SOLUTIONS • QUALITEL • QUINTEA • RABOT DUTILLEUL NACARAT • REALITE HUB S • RENESAS • RESOLVING • REXEL • ROBEAU • S2E2 • S2I COURANT FAIBLE • SANTECH • SCHNEIDER ELECTRIC • SE3M • SEMTECH • SERCE • SFEL • SFR • SIBCO • SIEMENS • SIRLAN • SISA France • SLAT • SMART CUBE • SMART USE • SMARTENON • SMARTHAB • SNACG • SNAPP • SNEF CONNECT • SOMFY • SONEPAR • SPIE • SPIE BATIGNOLLES • SPINALCOM • SPL LYON CONFLUENCE • SPRINGBOK MOBILITY • STUDINNOV • SXD • SYLFEN • SYSELIA • SYSTECHMAR • TECHNAL • TECHNILOG • TEVOLYS • TRIDONIC • TRYO2SYS • TT GEOMETRES EXPERTS • UBIANT • ULIS • UNIBAIL-RODAMCO • UNIVERSITE DE RENNES 1 • URBAN PRACTICES • URBEST • VALLOGIS • VEOLIA • VERTUOZ BY ENGIE • VINCI ENERGIES • VINCI FACILITIES • WAGO • WEBINAGE • WICONA • WISEBIM • WIT • YOUSE • Z#BRE • ZEPLUG

The SBA (Smart Buildings Alliance) was established in 2012 and spearheads smart building in France. The primary aim of this association is to provide support to all players of the building industry and regional players regarding digital technology. Leveraging on a highly cross-functional approach, it organises the conversion of the various trades in the sector: local authorities, planners, real-estate firms, landlords, promotors, builders, architects, engineering firms, consultant firms, equipment manufacturers, installers, telecom operators, industrial players in the computer and network sectors, publishers of software solutions, energy operators, operators and service companies.

www.smartbuildingsalliance.org • contact@smartbuildingsalliance.org
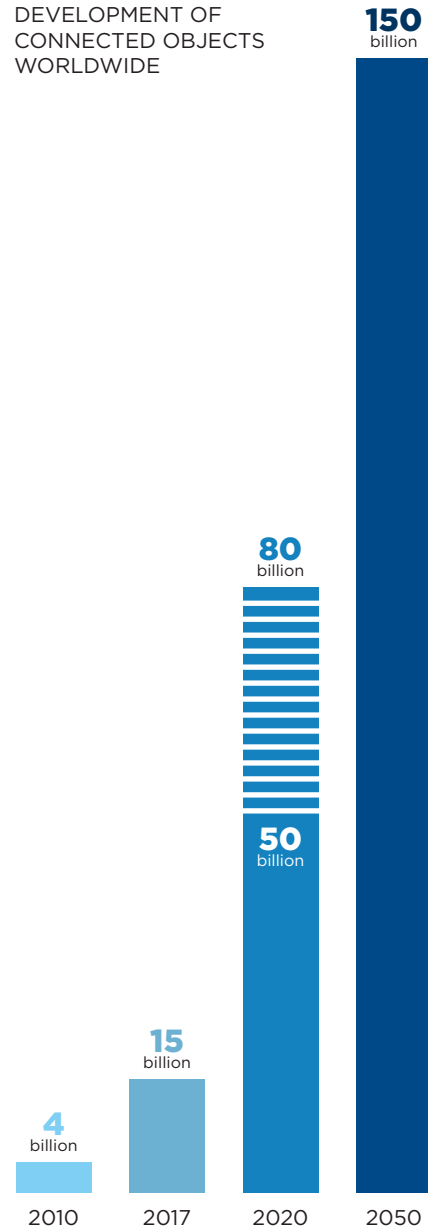
#SBA_France in SBA - Smart Buildings Alliance for Smart Cities

R2S® READY2SERVICES

THE NEW GENERATION REFERENCE FRAMEWORK FOR CONNECTED AND COMMUNICATING BUILDINGS

SBA SMART BUILDINGS ALLIANCE for SMART CITIES

150
billion

80
billion

50
billion

15
billion

4
billion

2010   2017   2020   2050

Within a single generation, digital technology has become a central driver of our economic development and a powerful tool in transforming our daily lives. It (inter)acts with/on the objects around us, our homes, our workplaces and in general our way of life. Almost every day, new services are introduced, new connected objects are being created and new uses are being invented, providing us with an ever-increasing array of options, thereby stimulating our capabilities for interaction with the world around us. This digital revolution is a challenge for many economic sectors and marks a major shift. For example, the building sector has to reinvent a new way of designing, executing and operating buildings which means that trades must work closer together in a cross-cutting manner and acquire new expertise in information technologies.

As a result, the SBA is offering a new concept for buildings: a solidarity-based and human-centric connected building, compatible with a wide range of services and able to interact with the user and its environment. It also forms part of the sustainable and smart city of the future; a more efficient building whose value-in-use contributes to the well-being of its occupants and its value on the property market. To meet these requirements, the SBA has developed the R2S (Ready2Services) reference framework for a building which becomes a genuine "service platform" organised around its living spaces and activities.
R2S (Ready2Services) is therefore a new generation reference framework which applies to all buildings, whether office, service or residential buildings, be they newly built or renovated. As such, it enables the deployment of a vast and diverse range of services including the following:

ENERGY SERVICES: Real-time monitoring, archiving and tracking of the building consumption trends, adjustment of these trends to the presence of users with consideration of data inside and outside of the building, provision of dashboards, analysis of the energy profile, prediction and decision-making support, opening of the building to the Smartgrid.

SERVICES FOR BUILDINGS: Communication services for the common areas of the building, multi-technical operation – maintenance management, security and safety alerts for the building, management of comfort, well-being and health parameters (temperature, humidity, lighting, air quality, noise levels, etc.).

SERVICES FOR OCCUPANTS: Communication services for the private spaces, geolocation services, signalling and guiding, dynamic display of information, real-time management of shared resources: conference rooms and video conferences, car parks, co-working spaces, recreational areas, intercompany canteens, etc.
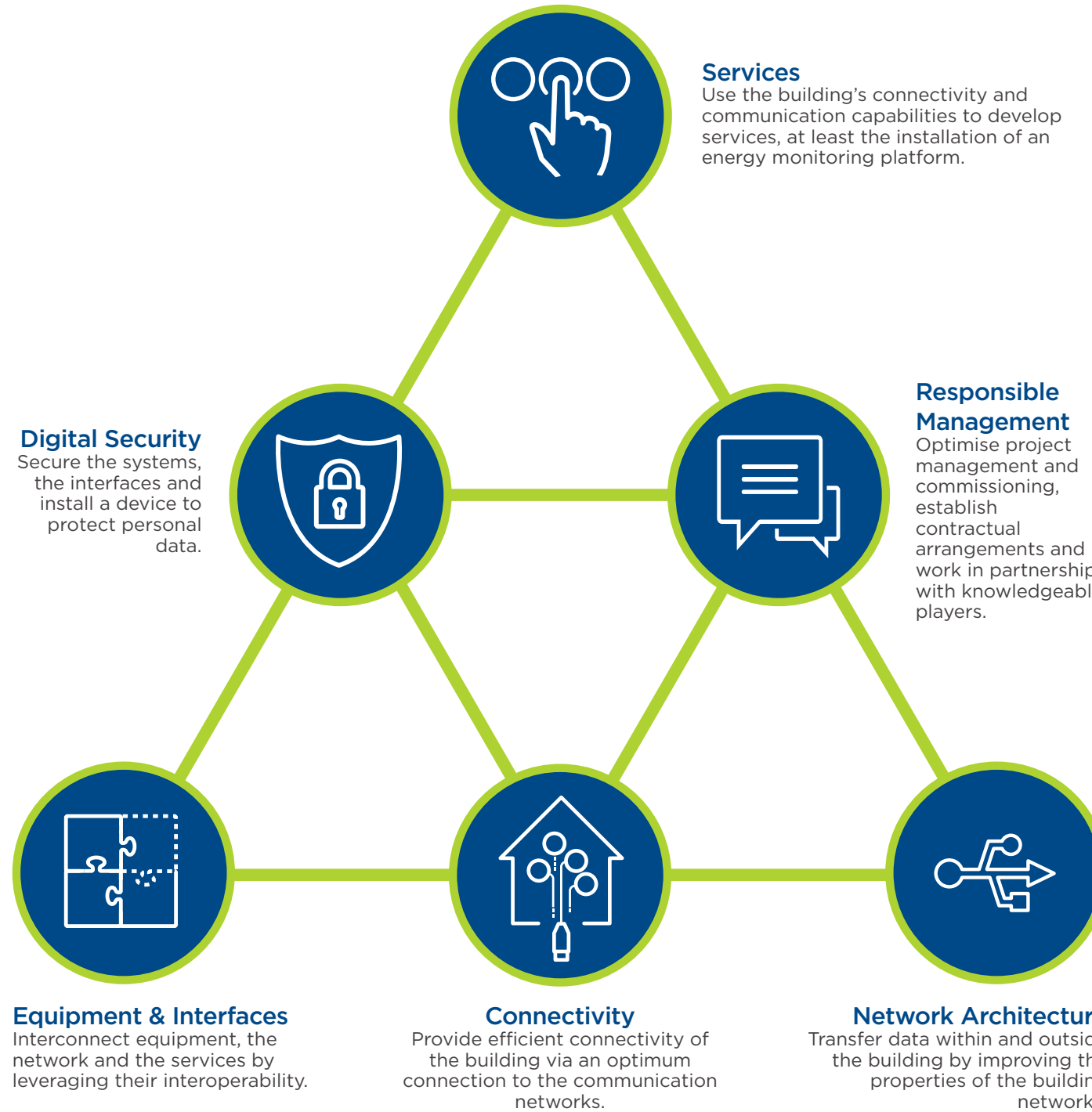
BENEFITS OF THE R2S APPROACH

PROVIDING MORE SERVICES for the stakeholders and users of the building: communication services of the building, services for occupants, ability to integrate new services from digital innovations...

OPTIMISING OPERATING COSTS: building monitoring, reduction of operating costs, quality control of the services provided...

IMPROVING FLEXIBILITY AND SCALABILITY: in order to guarantee the durability of the building and enhance diverse uses by adapting resources based on needs, the ability to reconfigure the spaces and associated services...

ENHANCING ATTRACTIVENESS: building 2.0 focused on the user, open to its environment, which interfaces with the ecosystems of the region, smartgrids, "flex" economy, mobility and health

R2S, THE REFERENCE FRAMEWORK FOR THE CONNECTED AND COMMUNICATING BUILDING

Services
Use the building's connectivity and communication capabilities to develop services, at least the installation of an energy monitoring platform.

Digital Security
Secure the systems, the interfaces and install a device to protect personal data.

Responsible Management
Optimise project management and commissioning, establish contractual arrangements and work in partnership with knowledgeable players.

Equipment & Interfaces
Interconnect equipment, the network and the services by leveraging their interoperability.

Connectivity
Provide efficient connectivity of the building via an optimum connection to the communication networks.

Network Architecture
Transfer data within and outside the building by improving the properties of the building networks.

R2S (Ready2Services) forms part of an overall approach that encompasses the connectivity of the building and the services for the building. The R2S (Ready-2Services) reference framework describes the key requirements for communication between the building systems and services. These will enable the building to provide a wide and scalable range of services by relying on a common federating base, i.e. the network infrastructure of the building and the connected equipment related thereto.

This framework, structuring the issues and language elements common to the sector, leads to the definition of the connected and communicating building, the result of work carried out in partnership between the SBA and the HQE-GBC France Alliance, with the contribution of the FFD (French Home Automation Federation), the IGNES professional union and the certifying bodies Certivea (certified R2S agent for office and service buildings) and Cerqual (NF Habitat HQE for residential buildings).

The basis of this work was included in the charter of the connected, solidarity-based and human-centric building, presented by the French Minister of Regional Cohesion in December 2017 and adapted by over one hundred representative players in the building sector.
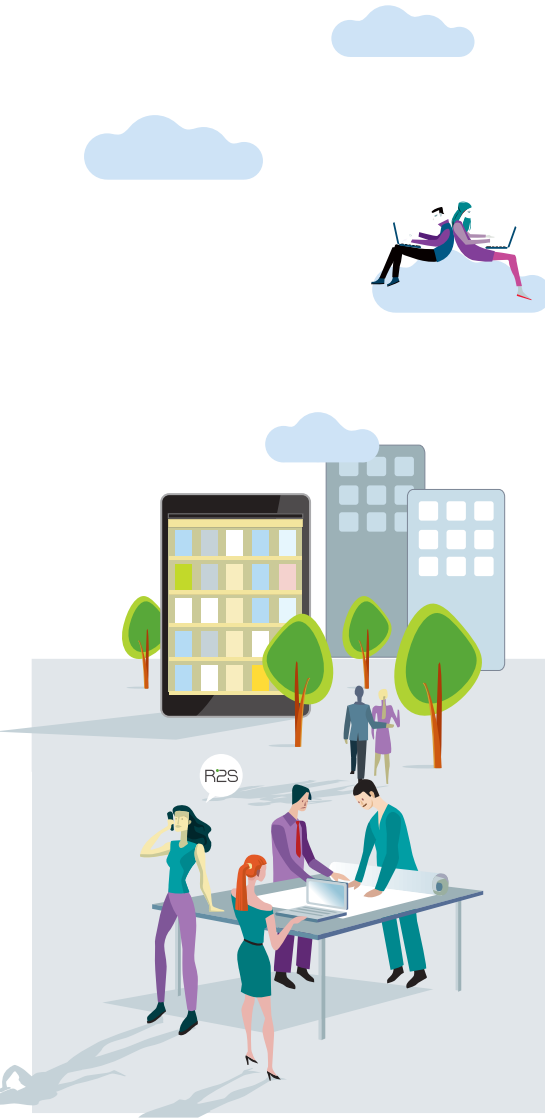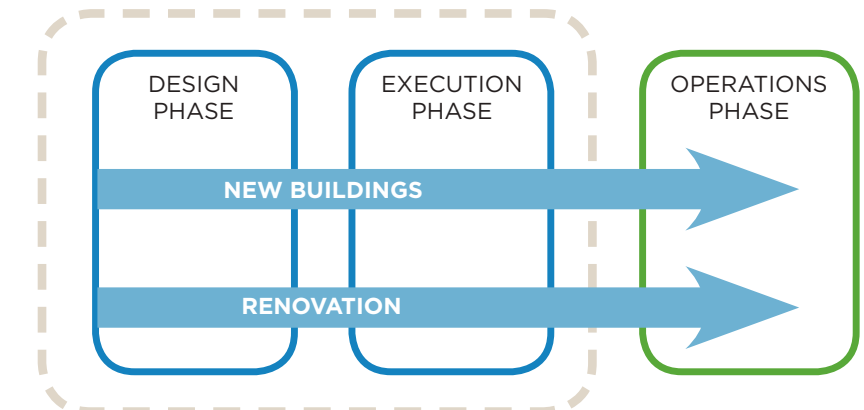
FOR OFFICE/SERVICE BUILDINGS

R2S
READY2SERVICES

The R2S (Ready2Services) label which meets the criteria of the R2S frame of reference stemming from the SBA's R2S framework is issued by Certivea for non-residential buildings: offices, shops, hotels, sporting facilities, etc. During the Building/Renovation phases, the R2S approach is applied by the developers, real-estate firms and the owners of the building. During the Operations phase it is applied by the building owners and/or the occupants with the owner's consent.

FOR RESIDENTIAL BUILDINGS

R2S

The approach proposed for residential buildings, in keeping with the same principles of the R2S (Ready2Services) reference framework, is one of self-assessment by the project initiators, namely the developers, land-lords, etc. based on a self-assessment grid adapted to the residential building which can be obtained directly from the SBA.

R2S
READY2SERVICES®

(LABEL DELIVERED BY CERTIVEA)

DESIGN PHASE	EXECUTION PHASE	OPERATIONS PHASE
NEW BUILDINGS →		
RENOVATION →		

R2S®
READY2SERVICES

THE NEW GENERATION REFERENCE FRAMEWORK FOR CONNECTED AND COMMUNICATING BUILDINGS

SBA
SMART BUILDINGS ALLIANCE
for SMART CITIES

THE R2S PRINCIPLES

A BASIS FOR BUILDING CONNECTIVITY, A PREREQUISITE FOR ITS ABILITY TO COMMUNICATE

The ability to route wired and/or radio connections to and inside the building is the first link in the chain of connected building services. Given the highly diverse and versatile nature of the services, related to the usage patterns and highly unpredictable medium and long-term development, a high operational flexibility of the links or media supporting the necessary wires is needed in order to adapt to the routing of new wires and thereby meet new connection needs during the life of the building.

POOLED IP NETWORK INFRASTRUCTURE FOR THE COMMUNICATION FLOWS OF THE BUILDING

A robust, secure and scalable intra-building infrastructure is required in order to implement an R2S (Ready2Services) solution based on smooth data flows. Through the implementation of international Ethernet-IP (Internet Protocol) standards, it makes it possible to converge all connected objects of the building towards a federating network and hence promote the pooling of the network infrastructure to ensure optimum efficiency.

TECHNICAL ARCHITECTURE SEPARATED INTO 3 INDEPENDENT LAYERS

This architecture, with its three independent levels, provides a solution to the problem of communication between the systems and the lifecycle of the building. It provides the building with greater flexibility and scalability by separating the applications layer (services), the communication layer (network infrastructure) and the equipment layer (connected equipment). The R2S (Ready2Services) models lays down the standard for interchangeability of each level, without modifying the other two levels so that a service does not require an equipment ecosystem or dedicated network infrastructure and vice versa.

FREE DATA FLOW AND SYSTEM INTEROPERABILITY

With the generalisation of open API (Application Programming Interface) programming interfaces, R2S (Ready2Services) provides free access to the data and services of the building. These API are available in local mode or in cloud mode depending on the services. They are covered by documentation and user licences which are clear and accessible to third parties. By applying these principles, R2S (Ready2Services) does not require specific ecosystems and takes into account the diversity of existing and future solutions, as long as they comply with these rules for open and free data flows.
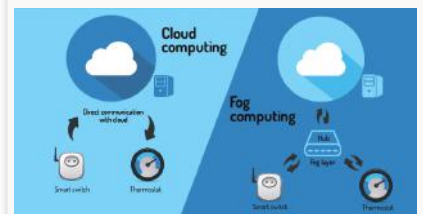
ROBUST DESIGN AT ALL TIMES

Making equipment ecosystems controllable does not obviate the need for equipment to be independent, in other words, the basic features of the equipment and the locally hosted services are still required, with or without internet connection with the outside.
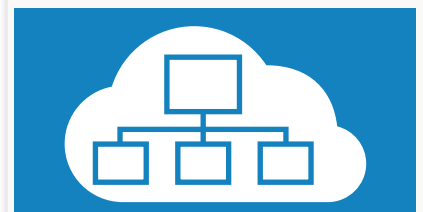
DIGITAL SECURITY AND PROTECTED DATA

Building functions which can be accessed and controlled remotely or from the occupant's Smartphone means that cybersecurity rules need to be taken into account to access the systems: network, connected equipment, services as well as the data protection procedures in compliance with the EU General Data Protection Regulation (GDPR).

THE 3 LAYERS OF THE CONNECTED AND COMMUNICATING BUILDING

"APPLICATIONS/SERVICES" LAYER
Where the building data is stored and processed to provide services to the users (occupant or operator).

"COMMUNICATION INFRASTRUCTURE" LAYER
The network layer of the building where data is transmitted on radio and/or wired medium to the Ethernet-IP (Internet Protocol) standard which makes the equipment accessible to the services layer and vice versa.

"CONNECTED EQUIPMENT" LAYER
Whether it involves sensors, actuators, controllers or connected objects, they must be able to communicate with the upper layer, i.e. the Ethernet-IP (Internet Protocol) network of the building.

R2S (Ready2Services) forms part of an overall approach that encompasses the connectivity of the building and the services for the building. The R2S (Ready-2Services) reference framework describes the key requirements for communication between the building systems and services. These will enable the building to provide a wide and scalable range of services by relying on a common federating base, i.e. the network infrastructure of the building and the connected equipment related thereto.

This framework, structuring the issues and language elements common to the sector, leads to the definition of the connected and communicating building, the result of work carried out in partnership between the SBA and the HQE-GBC France Alliance, with the contribution of the FFD (French Home Automation Federation), the IGNES professional union and the certifying bodies Certivea (certified R2S agent for office and service buildings) and Cerqual (NF Habitat HQE for residential buildings).

The basis of this work was included in the charter of the connected, solidarity-based and human-centric building, presented by the French Minister of Regional Cohesion in December 2017 and adapted by over one hundred representative players in the building sector.
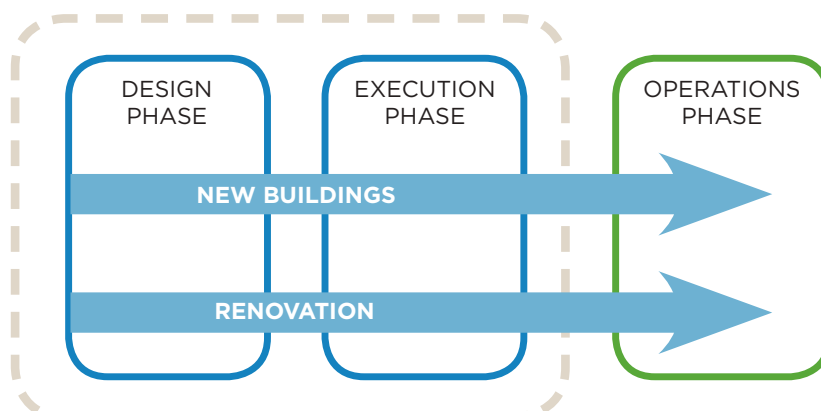
FOR OFFICE/SERVICE BUILDINGS

R2S®
READY2SERVICES

The R2S (Ready2Services) label which meets the criteria of the R2S frame of reference stemming from the SBA's R2S framework is issued by Certivea for non-residential buildings: offices, shops, hotels, sporting facilities, etc. During the Building/Renovation phases, the R2S approach is applied by the developers, real-estate firms and the owners of the building. During the Operations phase it is applied by the building owners and/or the occupants with the owner's consent.

FOR RESIDENTIAL BUILDINGS

R2S®

The approach proposed for residential buildings, in keeping with the same principles of the R2S (Ready2Services) reference framework, is one of self-assessment by the project initiators, namely the developers, land-lords, etc. based on a self-assessment grid adapted to the residential building which can be obtained directly from the SBA.

DESIGN PHASE

EXECUTION PHASE

OPERATIONS PHASE

NEW BUILDINGS

RENOVATION

DEVELOPMENT OF CONNECTED OBJECTS WORLDWIDE

150 billion

80 billion

50 billion

15 billion

4 billion

2010   2017   2020   2050

Within a single generation, digital technology has become a central driver of our economic development and a powerful tool in transforming our daily lives. It (inter)acts with/on the objects around us, our homes, our workplaces and in general our way of life. Almost every day, new services are introduced, new connected objects are being created and new uses are being invented, providing us with an ever-increasing array of options, thereby stimulating our capabilities for interaction with the world around us. This digital revolution is a challenge for many economic sectors and marks a major shift. For example, the building sector has to reinvent a new way of designing, executing and operating buildings which means that trades must work closer together in a cross-cutting manner and acquire new expertise in information technologies.

As a result, the SBA is offering a new concept for buildings: a solidarity-based and human-centric connected building, compatible with a wide range of services and able to interact with the user and its environment. It also forms part of the sustainable and smart city of the future; a more efficient building whose value-in-use contributes to the well-being of its occupants and its value on the property market. To meet these requirements, the SBA has developed the R2S (Ready2Services) reference framework for a building which becomes a genuine "service platform" organised around its living spaces and activities.
R2S (Ready2Services) is therefore a new generation reference framework which applies to all buildings, whether office, service or residential buildings, be they newly built or renovated. As such, it enables the deployment of a vast and diverse range of services including the following:

ENERGY SERVICES: Real-time monitoring, archiving and tracking of the building consumption trends, adjustment of these trends to the presence of users with consideration of data inside and outside of the building, provision of dashboards, analysis of the energy profile, prediction and decision-making support, opening of the building to the Smartgrid.

SERVICES FOR BUILDINGS: Communication services for the common areas of the building, multi-technical operation – maintenance management, security and safety alerts for the building, management of comfort, well-being and health parameters (temperature, humidity, lighting, air quality, noise levels, etc.).

SERVICES FOR OCCUPANTS: Communication services for the private spaces, geolocation services, signalling and guiding, dynamic display of information, real-time management of shared resources: conference rooms and video conferences, car parks, co-working spaces, recreational areas, intercompany canteens, etc.

BENEFITS OF THE R2S APPROACH

PROVIDING MORE SERVICES for the stakeholders and users of the building: communication services of the building, services for occupants, ability to integrate new services from digital innovations…

OPTIMISING OPERATING COSTS: building monitoring, reduction of operating costs, quality control of the services provided…

IMPROVING FLEXIBILITY AND SCALABILITY: in order to guarantee the durability of the building and enhance diverse uses by adapting resources based on needs, the ability to reconfigure the spaces and associated services…

ENHANCING ATTRACTIVENESS: building 2.0 focused on the user, open to its environment, which interfaces with the ecosystems of the region, smartgrids, "flex" economy, mobility and health

R2S, **THE REFERENCE FRAMEWORK FOR THE**

Services
Use the building's connectivity and communication capabilities to develop services, at least the installation of an energy monitoring platform.

Responsible Management
Optimise project management and commissioning, establish contractual arrangements and work in partnership with knowledgeable players.

Digital Security
Secure the systems, the interfaces and install a device to protect personal data.

Equipment & Interfaces
Interconnect equipment, the network and the services by leveraging their interoperability.

Connectivity
Provide efficient connectivity of the building via an optimum connection to the communication networks.

Network Architecture
Transfer data within and outside the building by improving the properties of the building networks.

R2S®
READY2SERVICES

(LABEL DELIVERED BY CERTIVEA)

THE **HONORARY** MEMBERS

ABB • ALTAREA COGEDIM • ARTELIA Passion & Solutions • ON assystem • axians • barbanel INGENIERIE · FLUIDES • BNP PARIBAS REAL ESTATE • bouygues TELECOM

CISCO • Deloitte. • EIFFAGE ÉNERGIE • ENGIE Axima • ENGIE Ineo • enocean alliance No Wires. No Batteries. No Limits. • FAYAT ENERGIE SERVICES • ga SMART BUILDING • GRDF

HSBC • ICADE • idex • iPorta • legrand • LITED TAKING CARE OF LIGHT • neobuild • NXP • orange

PROLOGIS • PICHET • RENESAS • Resolving • Schneider Electric • SFR • SIEMENS • SNEF

GROUPE SNI GROUPE CAISSE DES DÉPÔTS • SPIE • ubiant Créateur de solutions pour bâtiments intelligents • Vertuoz by ENGIE • VINCI ENERGIES • VINCI FACILITIES • WAGO INNOVATIVE CONNECTIONS • WIT

THE MEMBERS

ABB • ACCENTA • ACCOR INVEST • ACOME • ACR • ACS2I • ACTIWATT • ADEUNIS RF • AFPA-TOULOUSE • AIRELIOR FACILITY MANAGEMENT • AIRRIA • ALCANTE • ALIAXIS • ALLIANZ REAL ESTATE FRANCE • ALPHA RLH • ALTAREA COGEDIM • ALTECON • ALTERNET • AN2V • APILOG AUTOMATION • ARC INFORMATIQUE • ARCHIMEN • ARCOM • ARISTOTE • ARKHENSPACES • ARP ASTRANCE • ARTELIA • ASCAUDIT • ASSOCIATION HQE • ASSYSTEM • ATC France • AURI ZONE • AVIDSEN • AXIANS • AXXONE SYSTEM • AZUR SOFT • B.TIB • BAALBEK MANAGEMENT • BARBANEL • BCM ENERGY • BEEBRYTE • BG INGENIEURS CONSEILS • BIRDZ • BNP PARIBAS REAL ESTATE • BORDEAUX METROPOLE • BOUYGUES CONSTRUCTION • BOUYGUES ENERGIES & SERVICES • BOUYGUES IMMOBILIER • BOUYGUES TELECOM • CABA • CAE GROUPE • CAILLOU VERT CONSEIL • CAISSE DES DEPOTS • CAPENERGIES • CCI NICE COTE D'AZUR • CDU IMMOBILIER • CEA TECH • CERTIVEA • CISCO • CIT RED • CITYLITY • CLUSTER HBI • CNAM • CONNEK + CONSEIL • CONSEIL DEVELOPPEMENT METROPOLE DE LYON • COSTE ARCHITECTURES • COSTIC • COTHERM • COVIVIO • CR SYSTEM • CSTB • CYMBI.O • CYRISEA • DALKIA • DASSAULT SYSTEMES • DATA SOLUCE • DECAYEUX • DECELECT • DELOITTE • DELTA DORE • DEMATHIEU BARD • DIS INGENIERIE • DISTECH CONTROLS • DOVOP DEVELOPPEMENT • EON • E'NERGYS • EASY SMART BUILDING • ECONOCOM • EDF - BRANCHE COMMERCE • EDF OPTIMAL SOLUTIONS • EFFIPILOT • EGIS CONSEIL BATIMENT • EIFFAGE ENERGIE • ELITHIS • EMBIX • EN ACT ARCHITECTURE • ENERGIE IP • ENERGISME • ENGIE AXIMA • ENGIE INEO • ENLIGHTED • ENOCEAN • ENSEMBL' • ENSI POITIERS • F2A SYSTEMES • FAYAT •FFDomotique • FIFTHPLAY • GA SMART BUILDING • GA2B • GARCIA INGENIERIE • GCC • GEMALTO • GETEO • GETRALINE • GFI INFORMATIQUE • GLI - GROUPE EKIUM • GRAND PARIS HABITAT • GRDF • GREENERWAVE • GROUPE BETOM - IDEAM SOLUTIONS • GROUPE QUALICONSULT • HABITAT 76 • HAGER • HAVR • HENT CONSULTING •HESTIA INNOV • HONEYWELL • HSBC • HXPERIENCE • HYDRELIS • IBM • ICADE • ICONICS • IDEX • ILOGS FRANCE • IMMOBILIERE 3F • IMPERIHOME • INEX • INGETEL BET • INNOVATION PLASTURGIE COMPOSITES • INSITEO • INTENT TECHNOLOGIES • IP2I • IPORTA • ISTA • JOOXTER • KALIMA DB • KARDHAM CONNECT • KEO FLUIDES • KEYCLIC • KOONTOO • KORUS • L'IMMOBILIERE IDF • LEGRAND • LEON GROSSE • LES COMPAGNON DU DEVOIR • LEXCITY • LITED •LM INGENIERIE • LONMARK FRANCE • LUTRON ELECTRONICS • LUXENDI • MBA INGENIERIE • MCS SOLUTIONS • MEDIACONSTRUCT • MICROSENS • MIOS • NEOBUILD • NETISSE • NETSEENERGY • NEXITY • NEXTDOOR • NODON • NOVAL • NXP • OCCITALINE • OGER INTERNATIONAL • OGGA • OPEN MANAGEMENT • OPENFIELD • ORANGE • OTI FRANCE •OVERKIZ • OYA LIGHT • OZE ENERGIES • PARTAGER LA VILLE • PHILIPS LIGHTING • PICHET • PLACE DES ENERGIES • PLAN BATIMENT DURABLE • POLE TES • POLESTAR • POSTE IMMO • PREMIUM CONSEIL • PRESTANTENNES • PRIVA • PROLOGIS• PROMOTELEC SERVICES • PROXISERVE • QARNOT COMPUTING • QOS SOLUTIONS • QUALITEL • QUINTEA • RABOT DUTILLEUL NACARAT • REALITE HUB 5• RENESAS • RESOLVING • REXEL • ROBEAU • S2E2 • S2I COURANT FAIBLE • SANTECH • SCHNEIDER ELECTRIC • SE3M • SEMTECH • SERCE • SFEL • SFR • SIBCO • SIEMENS • SIRLAN • SISA France • SLAT • SMART CUBE • SMART USE • SMARTENON • SMARTHAB • SNACG • SNAPP • SNEF CONNECT • SOMFY • SONEPAR • SPIE • SPIE BATIGNOLLES • SPINALCOM • SPL LYON CONFLUENCE • SPRINGBOK MOBILITY • STUDINNOV • SXD • SYLFEN • SYSELIA • SYSTECHMAR • TECHNAL • TECHNILOG • TEVOLYS • TRIDONIC • TRYO2SYS • TT GEOMETRES EXPERTS • UBIANT • ULIS • UNIBAIL-RODAMCO • UNIVERSITE DE RENNES 1 • URBAN PRACTICES • URBEST • VALLOGIS • VEOLIA • VERTUOZ BY ENGIE • VINCI ENERGIES • VINCI FACILITIES • WAGO • WEBINAGE • WICONA • WISEBIM • WIT • YOUSE • Z#BRE • ZEPLUG

The SBA (Smart Buildings Alliance) was established in 2012 and spearheads smart building in France. The primary aim of this association is to provide support to all players of the building industry and regional players regarding digital technology. Leveraging on a highly cross-functional approach, it organises the conversion of the various trades in the sector: local authorities, planners, real-estate firms, landlords, promotors, builders, architects, engineering firms, consultant firms, equipment manufacturers, installers, telecom operators, industrial players in the computer and network sectors, publishers of software solutions, energy operators, operators and service companies.

www.smartbuildingsalliance.org • contact@smartbuildingsalliance.org

#SBA_France • SBA - Smart Buildings Alliance for Smart Cities