



Sixth Framework Programme




## Industrialised, Integrated, Intelligent Construction

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**DRAGADOS S.A.**  
 Coordinador del Proyecto

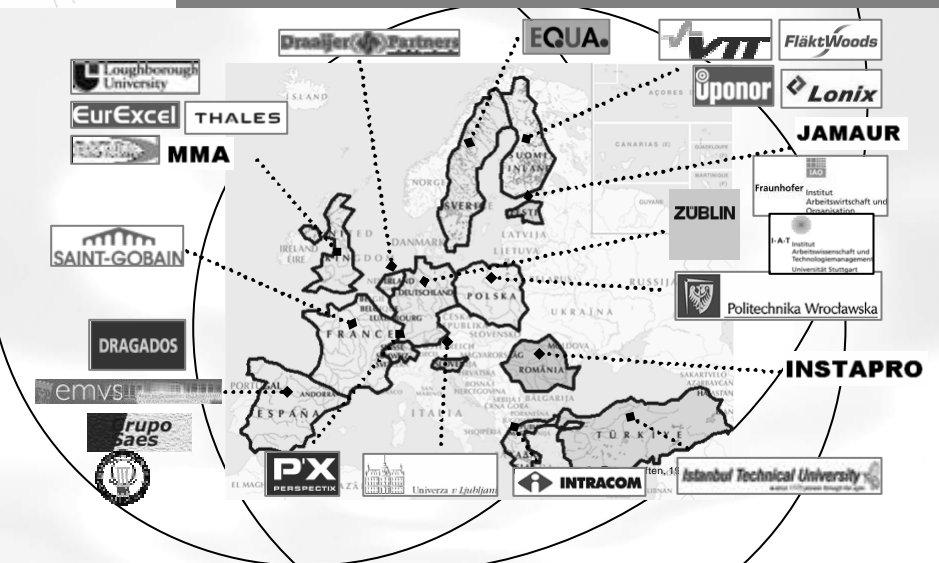


European  
Commission



### Consorcio:

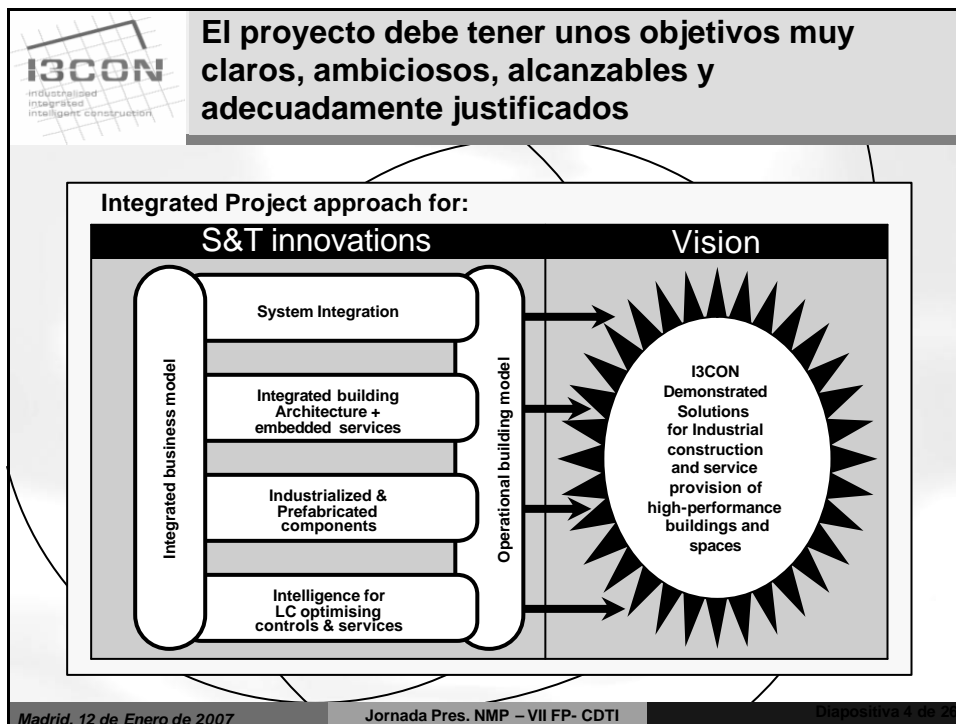
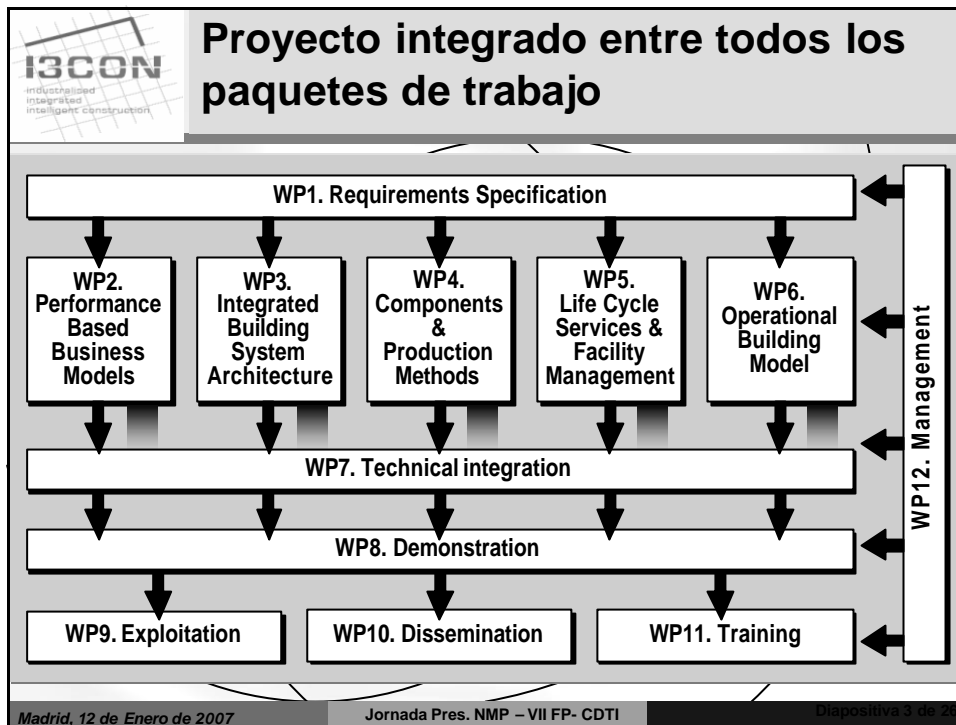
## 26 Socios de 14 Países




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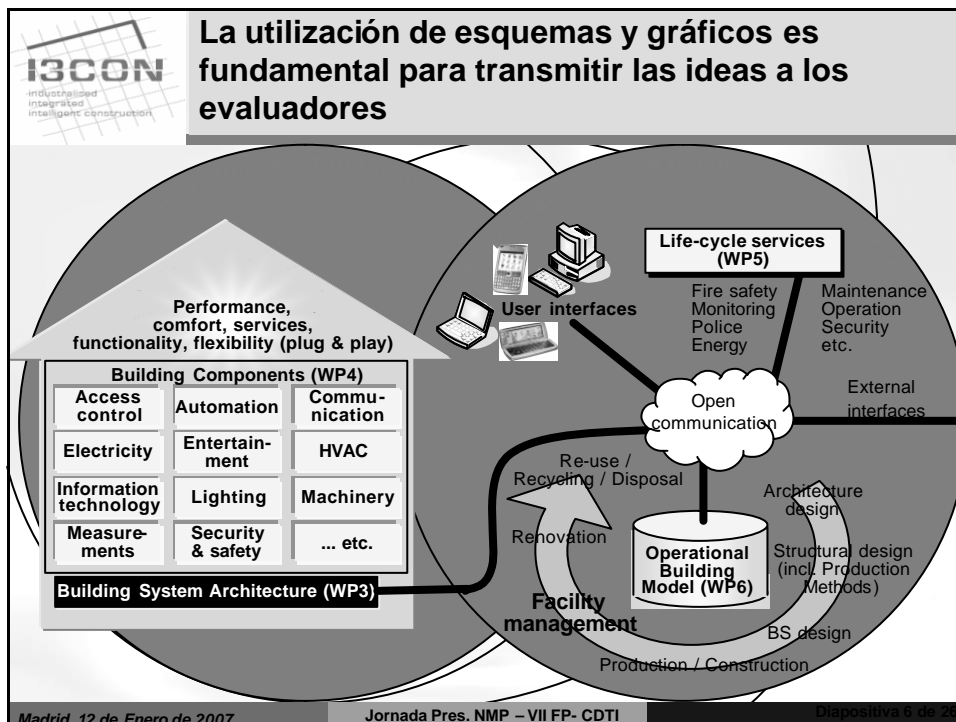


## La propuesta debe tener objetivos en varios niveles desarrollados y justificados en todas las tareas y actividades

- ✍ Building systems using **distributed control systems** with **embedded sensors, wireless connections, ambient user interfaces and autonomous controllers**
- ✍ **Industrialised production** of building components with **integrated services and intelligence**
- ✍ **Multifunctional, efficient, sustainable, reusable, interoperable and user friendly**
- ✍ To create impact towards a **considerable reduction of time and cost during delivery and use**
- ✍ A Major breakthrough towards **Industrially produced, Integrated and Intelligent building systems**
  - ✍ Customer- and value-driven business model;
  - ✍ Industrialisation of construction and building lifetime processes;
  - ✍ Fully integrated smart systems and cross-system functionality;
  - ✍ A virtual building model for collaborative building engineering;
  - ✍ Delivery of high performance spaces to building users

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## Es fundamental evaluar con cifras (demostrables) los beneficios del proyecto

New business processes developed inside I3CON IP generate new lifecycle value to building users/operators/clients. The facilities will be delivered with **lifecycle cost reductions in excess of 40%** and **savings in maintenance and repair together in excess of 70%** upon the type of buildings, together with the enhanced comfort, safety and security for the human beings.



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## Explicar para posibles evaluadores no expertos en cada aspecto del proyecto los beneficios del mismo desde todos los aspectos



One of the main causes of accidents are the auxiliary elements, like scaffoldings, ladders, and others, with the embedded sensors technology and the management of the data at distance the persons are at floor level without danger of injury.

Indirect reduction thanks to the comfort and healthy environment of high performance building spaces.


**Avoiding accidents and improving safety and security.**



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## Explicar para posibles evaluadores no expertos en cada aspecto del proyecto los beneficios del mismo desde todos los aspectos

The **controlled spaces** designed in the technologies developed through the I3CON project will help to improve security thanks to the following parameters:


- Embedded sensors technologies allow us to **detect changes in parameters** inside the built environment and could be programmed to mark non-authorized intrusions (WP 3)
- The **state, situation and operation capacity of any building or facility** is enhanced through the intelligence procedures and capabilities of the I3CON business process (WP 2)
- **Virtual model technologies** developed in WP 6 is a main **tool for the management of security issues** where the condition of each space and situation can be handled efficiently.
- **I3CON technologies** are an important tool for **training** purposes in security affairs.

**Security issues improved thanks to I3CON technologies**



**Avoiding accidents and improving safety and security.**


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## No usar términos grandilocuentes si no se justifican, se explican y se detalla lo que el consorcio entiende de forma precisa para cada término

**I3CON is about Industrialised, Integrated and Intelligent Construction. Sustainable energy technologies is the focus of the project is to be integrated among others. The major systems along the life-cycle.**

**Integration of Sustainable Energy Technologies in buildings**




Consideration of advanced sustainable energy technologies

- ✍ Passive Energy
- ✍ Sustainable Energy Sources (Solar, Thermal, Wind)
- ✍ Energy generating components
- ✍ Low Exergy

Incorporate methods and tools developed in I3CON to reduce negative sustainability impacts

- ✍ intelligent sensor networks for component control
- ✍ Virtual simulation for energy consumption
- ✍ Improved maintenance and service



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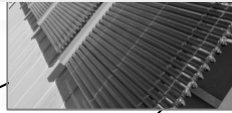

## Ser precisos con las cifras y los datos, dar las fuentes de los mismos, y adjuntar los cálculos de los datos o mejoras propuestas con el proceso de estimación.

Introduction through design, of the passive sustainable energies, through study of local conditions, available resources and study of the user conditions (10 to 20% reductions in energy consumption).

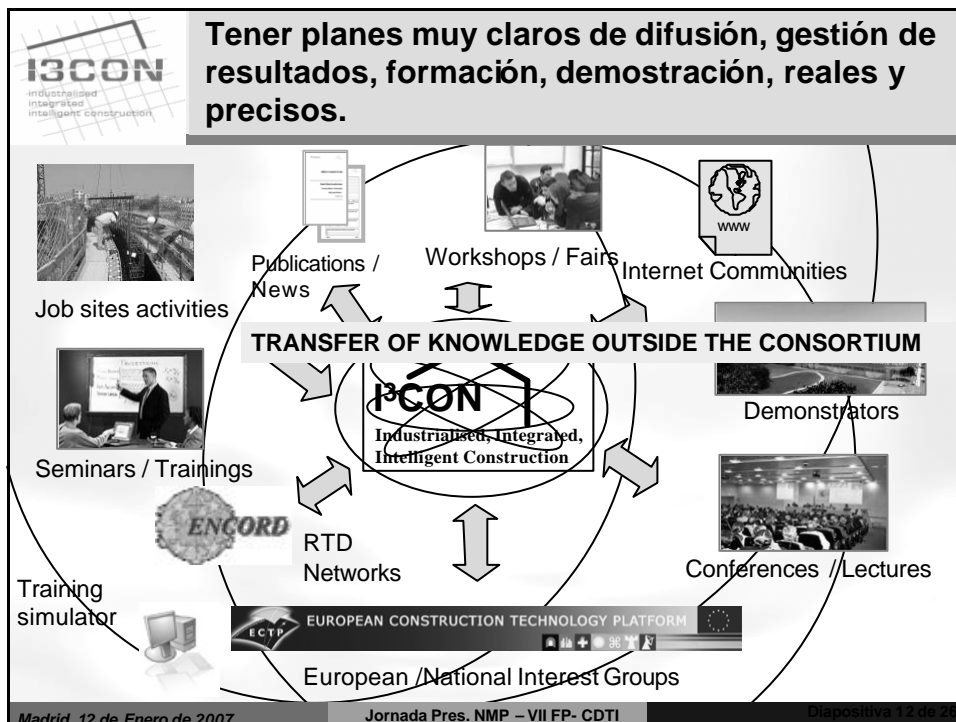
- The mix of passive technologies with active solar thermal ones will produce high efficiency in supply of hot water and reduction of the consumptions with an increase in the comfort of the users (up to 50% Cost reductions in energy bills).
- Natural ventilation technologies, increase the comfort of the user with little energy consumption, and the wind chimneys and special floors to circulate cool or warm air to provide comfort with minimum disruption in the installations.

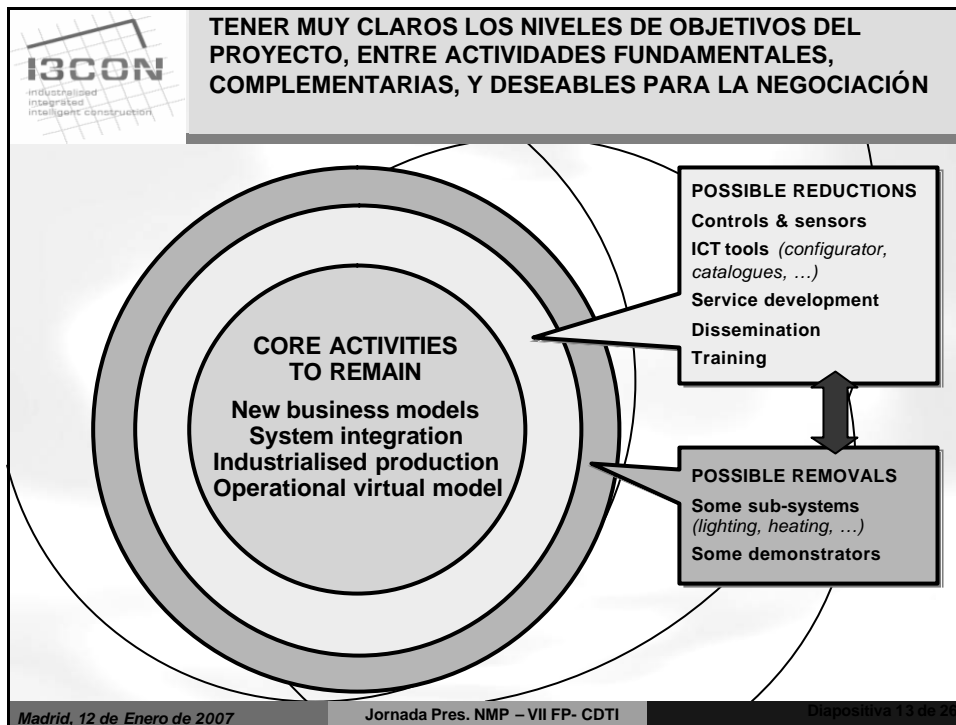



### Integration of Sustainable Energy Technologies in buildings

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**TENER MUY CLAROS LOS NIVELES DE OBJETIVOS DEL PROYECTO, ENTRE ACTIVIDADES FUNDAMENTALES, COMPLEMENTARIAS, Y DESEABLES PARA LA NEGOCIACIÓN**

Total	Core tasks to remain :	44 %	Tasks could be reduced :	34 %	Some tasks could be removed :	23 %
1720	754		579		387	
<b>WP1</b>	<b>38</b>		<b>22</b>		<b>12</b>	
72	T1.2 Requirement specifications T1.4 Validation of final RTD results	23 15	T1.3 Peer-review of RTD progress	22	T1.1 Requirement specification procedure	12
<b>WP2</b>	<b>70</b>		<b>32</b>		<b>16</b>	
118	T2.1 Value-creating business models T2.3 Operational business processes	35 35	T2.2 LC performance model & metrics	32	T2.4 Testing and validation	16
<b>WP3</b>	<b>201</b>		<b>70</b>		<b>60</b>	
331	T3.1 Overall BS architecture T3.2 Space concepts and reference solutions T3.5 Integr. Building Automation and Control	29 37 99	T3.7 Smart components and materials T3.6 Pathways for BS installations T3.8 Sensor networks	36 12 58	T3.3 HVAC system concepts T3.4 Electrical system concepts	43 17
<b>WP4</b>	<b>85</b>		<b>67</b>		<b>108</b>	
260	T4.1 System requirements to components T4.2 Innovative products & production concepts T4.4 Control components	32 53 27	T4.9 Structural components and fittings T4.3 Lightning components T4.5 Ventilation components	40 24 18	T4.6 Windows and surfaces T4.7 Piping, heating and cooling components T4.8 Electrical components	36 14 16
<b>WP5</b>	<b>48</b>		<b>78</b>		<b>69</b>	
195	T5.1 Concepts and methods for service-engineering T5.3 Service integration management	27 21	T5.2 Service configuration tool T5.4 New value driven services	25 53	T5.5 Mobile productivity tools and methods T5.6 Performance Monitoring and Reporting	27 42
<b>WP6</b>	<b>86</b>		<b>59</b>		<b>16</b>	
161	T6.1 BS integration platform T6.2 Interfaces to BAC	24 31	T6.3 Simulation engine and toolset T6.4 Catalogues of components & models	31 39	T6.5 Ambient user interfaces T6.6 Integration and testing	20 16
<b>WP7</b>	<b>51</b>		<b>16</b>			
67	T7.1 Framework: ref. models, strategy, roadmap T7.2 Risk assessment	36 9	T7.3 Quality assurance T7.4 System handbook	6 16		
<b>WP8</b>	<b>77</b>		<b>30</b>		<b>94</b>	
201	T8.1 Demonstration scenarios and plans T8.2 Virtual building demonstrator T8.3 Production method demonstrator	15 12 50	T8.4 Building demonstrator T8.5 Retrofitting building demonstrator	30 30	T8.41 School building demonstrator T8.42 Office building demonstrator T8.43 Health care building demonstrator	36 34 24
<b>WP9</b>	<b>13</b>		<b>74</b>			
87	T9.1 IPR strategy T9.2 Dissemination strategy	8 5	T9.3 Exploitation plans T9.4 Usage scenarios	25 27	T9.5 Impact assessment	22
<b>WP10</b>	<b>66</b>		<b>66</b>			
66	T10.1 Community of interest T10.2 Web portal	14 12	T10.3 Publications and newsletters T10.4 Concertation	15 8	T10.5 Events	17
<b>WP11</b>	<b>29</b>		<b>65</b>		<b>12</b>	
106	T11.1 Training concept T11.5 Embedded learning in BS systems	14 15	T11.2 Industrial training courses T11.3 University education	26 39	T11.4 Training simulator	12
<b>WP12</b>	<b>56</b>		<b>28</b>			
56	T12.1 Administrative management	28	T12.2 S&T management	28		

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**Tener planes muy claros de difusión, gestión de resultados, formación, demostración, reales y precisos.**

- ✍ **feedback** will be gathered through the stakeholder community of interest (set up and maintained in WP10-T10.1)
- ✍ Consolidated information package (book):  
 "Integrated intelligent Building Services solutions for High Performance Buildings - Rethinking Values, Services, Sustainability, Production Methods and Business Models in Construction in the new Millennium. **System handbook for EU-wide take-up of the results and transformation**

TRANSFER OF KNOWLEDGE OUTSIDE THE CONSORTIUM

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Es fundamental hacer caso a las indicaciones del personal experto y a los funcionarios implicados en la evaluación de las propuestas, sus consejos son una ayuda y considero que se deben seguir al pie de la letra, como condición necesaria para tener éxito en un proyecto


## Writing the Proposal

Main issues to remind:

- Experts will assess and mark the proposal as it is described and presented. They should not make any assumptions or interpretations about the project in addition to what the proposers themselves have written in the proposal.
- nada debe darse por entendido. Todo debe explicarse.
- Hay que mostrar (guiar) a los evaluadores las respuestas que esperan encontrar
- Be brief and concise in your explanations

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# Writing the Proposal

**Main issues to remind:**

- use quantitative and measurable data for writing the proposal. If possible include references for any quantitative statement.
- usar tablas o gráficos para presentar/resumir la información relevante.
- develop an ambitious **plan of activities**
- el plan de actividades y/o las tareas deben de estar adecuadamente integradas (WPs)
- be sure that supporting modules for RTD actions are included (e.g. training, TT, spin-offs, IPR, ethics)

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# Writing the Proposal

**Main issues to remind:**

- highlight how results can be translated into products and services (after the end of the project if necessary)
- ensure the appropriate critical mass for the planned WPs. (el consorcio debe ser el adecuado para realizar el proyecto, ni uno más ni uno menos)
- ensure sufficient industrial participation
- la descripción de los participantes es recomendable hacerla en relación a su trabajo/papel en el proyecto.
- la subcontratación no debería existir (exageración)

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# Writing the Proposal

**Main issues to remind:**

- la descripción de recursos necesarios para la realización del proyecto debe efectuarse hasta a nivel de las categorías (personal, consumibles, equipamiento, viajes, subcontratación, etc.) en cada actividad.
- Necesario un Plan financiero para el proyecto desde el inicio:
  - costes anuales estimados por participante para todo el proyecto y por periodos anuales (incluso semestrales)
  - distribución de costes por actividades, categorías y personas/mes

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# Writing the Proposal

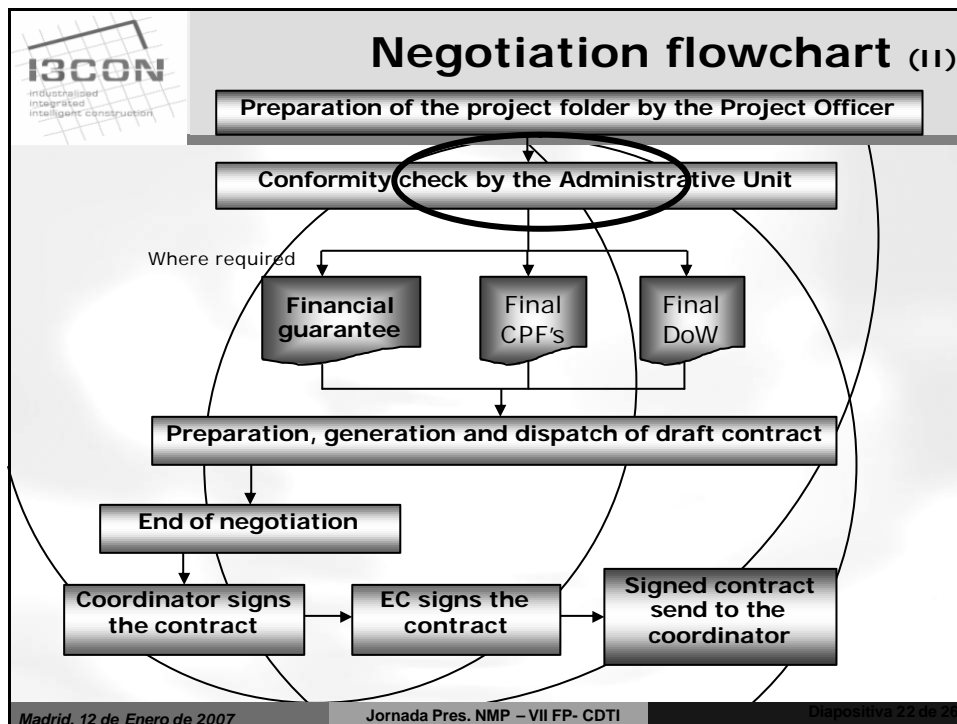
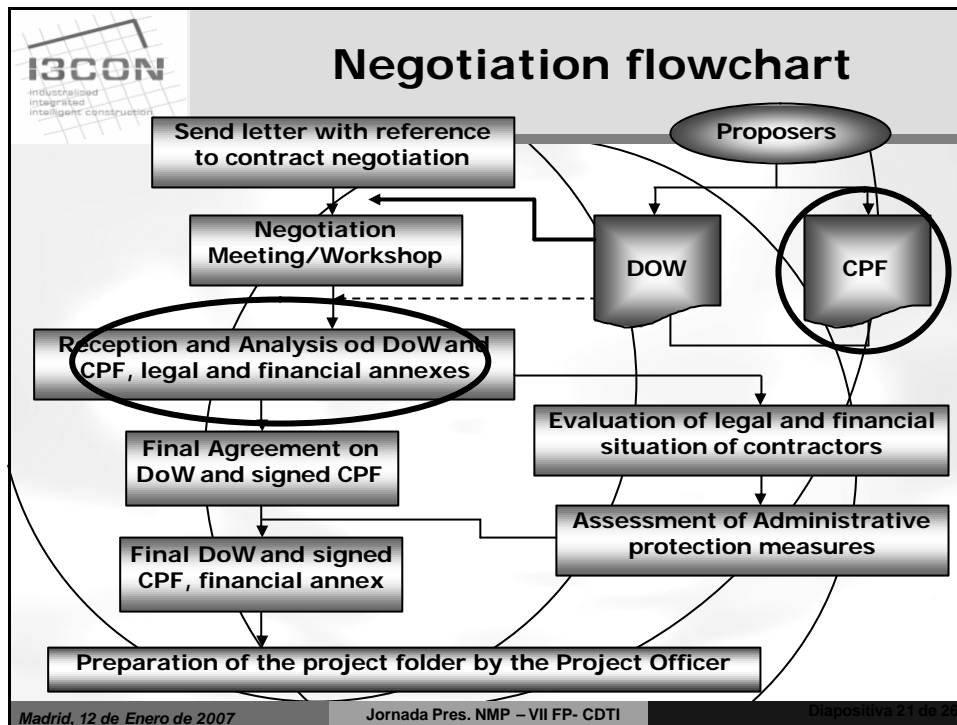
**Main issues to remind:**

- Ensure effective organizational, management and governance structure (e.g. board of management, permanent secretariat, scientific committee, assembly of partners, technical management, project coordinator, etc.)
- ? Consortium agreement
- ? Decision-making structure
- Project coordination
- Project management
- incluir un planes de gestión de riesgo, tanto desde el punto de vista financiero, administrativo y legal como técnico: identificación de los riesgos, su nivel/impacto y un plan de contingencia (cómo y quien lo puede realizar si es posible).
- Protection and dissemination of knowledge
- Use of pre-existing know-how and knowledge

**¡No copiarlo de otras propuestas, se debe notar que es específico para cada proyecto!**



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## Critical success factors for your IP

### Some suggestions ...

- ✍ Clear project programme, role of partners well defined
- ✍ Partners are committed to objectives (in line with business strategies)
- ✍ Effective management and understanding between partners
- ✍ Sound exploitation plans and continuous follow-up of exploitation and dissemination of results.

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## Expansion of Pages (IP)

See "Guide for Proposers"

**S\_PGIP\_200401\_EN.doc**

Demostrar que se ha hecho caso a las "sugerencias"

- ✍ Try to keep within page limits
- ✍ Highlight additions (some new evaluators)
- ✍ Avoid repeating information

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## Recommendations of experts


- ✍ **Advice**, not obligations
- ✍ **Be aware of other similar proposals**

**¡FUNDAMENTAL!**

*You will have possibility to discuss details with Project Officers this afternoon*

**Remember IP and Priority 3 objectives !**

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## Concluding remarks

nations

- **Use diagrams, if this helps**
- **Your proposal is still in competition with others....**

**Don't forget to use support from NCPs !**

**Lo suscribo totalmente**

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