

# Smart Data Transaction for CPS

**Project Technical Lead:** Colin Peters ([Colin Peters](#) elected 21/12/14)

**Project Committers detail:**

Committer	Committer Company	Committer Contact Info	Committer Bio	Committer Picture	Self Nominate for PTL (Y/N)
<a href="#">hatsumi iino</a>	Fujitsu	<a href="mailto:iino.hatsumi@fujitsu.com">iino.hatsumi@fujitsu.com</a>			
<a href="#">Toshimichi Fukuda</a>	Fujitsu	<a href="mailto:t_fukuda@fujitsu.com">t_fukuda@fujitsu.com</a>			
<a href="#">Hiroji Shigetome</a>	Fujitsu	<a href="mailto:shigetome.hiroj@fujitsu.com">shigetome.hiroj@fujitsu.com</a>			
<a href="#">Inoue Reo</a>	Fujitsu	<a href="mailto:inoue.reo@fujitsu.com">inoue.reo@fujitsu.com</a>			
<a href="#">Fukano Haruhisa</a>	Fujitsu	<a href="mailto:fukano.haruhisa@fujitsu.com">fukano.haruhisa@fujitsu.com</a>			
<a href="#">Yasushi Kurokawa</a>	Fujitsu	<a href="mailto:kurokawa.yasu@fujitsu.com">kurokawa.yasu@fujitsu.com</a>			
<a href="#">Yoshiko Tsuji</a>	Fujitsu	<a href="mailto:tsuji.yoshiko@fujitsu.com">tsuji.yoshiko@fujitsu.com</a>			
<a href="#">Colin Peters</a>	Fujitsu	<a href="mailto:colin.peters@fujitsu.com">colin.peters@fujitsu.com</a>			Y

**Presentation:**



**Use Case Details:**

Attributes	Description	Informational
Type	New	
Industry Sector	CPS, IoT	
Business driver	Cyber physical systems which combine sensor network with computing to monitor and control the physical environment become popular. The bandwidth of the sensor network depends on use cases. Large amounts of data from large amounts of sensor nodes will pressure the NW bandwidth between edge and clouds. Therefore, we need to have a means to optimize each NW bandwidth according to use cases. This blueprint propose a solution for NW bandwidth optimization.	

Business use cases	Smart city, agriculture, interactive live sports	
Business Cost - Initial Build Cost Target Objective	Depends on use cases. E.g. Monitoring sewerage water level Gateway:\$3000 Sensor node:\$2500 Water level sensor:\$1500	
Business Cost – Target Operational Objective	Depends on use cases. Power consumption and management for sensor node and gateway Cloud etc...	
Security need	The sensor node and gateway will be used outdoors in untrusted environment and it handles potentially privacy-sensitive data such as live video. Therefore, the device needs to support trusted boot, trusted key storage, and encrypted communication.	
Regulations	Depends on use cases. E.g. Monitoring sewerage water level  There are several environmental design guidelines.(IPx7, etc..)	
Other restrictions	Depending on use cases, there can be other requirements.	
Additional details	NA	