# Project One Page Description

Three proposers of three projects (Sabina, Supply and IOT4Blockchain) should prepare one-page description according to their perspective and we (national coordinators) will merge them to come up with one-page description of IDelta

Deadline: October 5th

# Project Overview

## Rationale of the Project

### Problem statement, solution and challenges

Each use case providers (Germany, Turkey, Spain and Sweden) should come up with at least 2 (preferably 3) problems about their pilots. The problem statement should answer three main questions:

1. What is the problem?
2. Why blockchain/DLT/IDelta is the solution for that problem
3. If blockchain/DLT/IDelta is the solution for that problem, what are the challenges.

After having all problems, solutions and challenges, we should also focus on further problems beyond the use cases.

Deadline: October 5th

### Project Innovations and Technological Value Chains

I will propose a Technological Value chain based on our definition from Stockholm. Also, I am expecting from Yuhong, Patrick and JuanMi as initial proposers and from Franz-Joseph and Mustafa (T2 Software) as pilot providers to define innovations according to their perspective with 2-3 paragraphs.

Deadline: October 5th

## Targeted Impact

### Market Analysis and Market Value Chain

I will again propose a Market Value Chain based on our definition from Stockholm. Also as an experienced business man, I would like to ask Patrick’s coordination for definition of Market Analysis with the help of other business partners (especially large industry partners: Henkel, Materna, BKM, …etc)

Deadline: October 12th

### Consortium Market Access

Each SME or Industry partner have to state their market access with a small paragraph (5-7 sentences will be ideal)

Argedor will focus on accessing smart communities and IoT market. Argedor plans to exploit the project results by developing loyalty based blockchain IoT applications for smart communities and presenting this applications to municipalities and private companies. Argedor has existing relationships with municipalities (Istanbul, Ankara and other municipalities in Turkey), ministries, partner companies and universities (Middle East Technical University) and is going to use its own ties to exploit project results. We expect that project out comes will let us to study in new research areas and strengthen our knowledge. To do so state of art applications is going to be developed and sold.

Deadline: October 12th

## Technology

### State of the Art (SotA) Analysis

Main sections (it is open to discuss and change)

* Overview of DLTs – Coordinated by Patrick, Yuhong/Rahim
* Blockchain and IOT – Coordinated by Patrick, Frank, and Juan Miguel
* DLT in Industry 4.0 – Coordinated by FJStewing, Henkel
* Blockchain and Smart Contracts - Coordinated by Mustafa, Patrick and Yuhong
* SotA of Loyalty Applications - Coordinated by Mustafa, Güven and Juan Miguel

Loyalty Applications:

Loyalty programs give reward points to consumers for making purchases and let consumers redeem their reward points for gifts. By their very nature, reward points look like an alt-coin and quack like an alt-coin. Currently, thanks to blockchain, reward points can become an alt-coin.

Loyalty programs drive repeat purchase of a brand by giving rewards to incent consumers to buy that brand (as against competing brands). Amazon Prime is widely hailed as the greatest driver of Amazon's success. So are the frequent flyer programs of most airlines and loyalty programs of many credit cards. Many other brands and third-party loyalty program providers have attempted many tactics over the years. Some of these are the following:

Coalition Loyalty:

Payback (Germany, India) and Nectar (UK) are two leading coalition loyalty programs that let consumers earn reward points by making purchases from multipleEarn Partners and redeem them for gifts at multiple Burn Partners. To that extent, they widen the network of merchants where consumers can earn and burn points and give a better chance to consumers to redeem their reward points before they lapse.

Reward Exchanges:

Consumers can trade reward points in one loyalty program with reward points of another loyalty program. For instance, if one has airline points and grocery store points and is unlikely to use its airline points before they expire, and another person is relocating to another city where her grocery points will become useless. A reward exchange would allow these people to trade their airline points for another one’s grocery points, thus ensuring that both of us safeguard the value of our points holdings. Reward exchanges should not be confused with loyalty consolidators like Using Miles and KeyRing. While the latter help consumers manage multiple loyalty programs from a single portal / app, they don't support trading of points across programs.

But these tactics have had limited success because of a few reasons:

Coalition loyalty programs operate under a major limitation: They can accept only one Earn / Burn Partner per product category - or at least this is what I was told when Payback let go its existing fashion partner Big Megamart (now Big Unlimited) in India when it signed up the bigger fashion brand Fashion Big Bazaar (FBB). As a result, liquidity - industry speak for stores where reward points can be redeemed - is restricted to one brand / merchant per product category.

Despite years of efforts, the "too many programs, too few points" problem hasn't gone away and the performance of loyalty programs remains lackluster.

Blockchain can provide a huge shot in the arm to loyalty programs and raise their performance to the next level.



Key Metrics of Blockchain Loyalty Program

Blockchain offers more than just the ability to convert reward points to an alt-coin.As MIT Technology Review explains in Let’s Destroy Bitcoin: “These tokens are not unlike the points systems and gift cards that companies have used to hem in their customers for decades. What changes when you record these assets on a blockchain is that they become easily and securely transferable.”

loyalty programs by delivering two major benefits:

Unlimited liquidity. Consumers will be able to freely trade their Coins for Bitcoin and other cryptocurrencies that are widely accepted by tens of thousands of merchants

Buoyancy. Cryptoexchange listing will inject buoyancy into their Coin, even if the added lift is largely speculative in nature at this point. The buoyancy will curb feelings of misgivings when consumers find that their $100 worth of points in one program trades for only $70 worth of gifts in another program. It's human nature to rationalize the fractionally higher cost today as a premium if there's a chance of earning multibagger returns on the investment tomorrow. [[1]](#endnote-1)

Link to previous and/or current collaborative research projects:

Anyone who did similar projects before, please send the names and details. I would like George to be responsible for this section (to search, define collaborative research projects)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Project Name | Cooperative Programme | Time period (approx.) | Technical Focus | Relationship |
| <ACRONYM> | <e.g. ITEA> | <2010-2013> | <Text to be inserted here> | <Text to be inserted here> |
| <ACRONYM> | <e.g. H2020> | <2012-?> | <Text to be inserted here> |  |
| <ACRONYM> |  |  |  |  |

Deadline: October 12th

### Proposed technological innovation and novelty in relation to the SotA

We should state that problems defined in 2.1.1 are not fully fulfilled in current SotA and define how IDelta fills those gaps in relation to the SotA. We are going to focus on this section after having definition of SotA and Problem statements.

Deadline: October 19th

### Expected Project Outputs

There will be three main clusters for the outputs:

Common Approach, Standards, Reference Architecture that defines common mechanism/platform/middleware

Common mechanism/platform which serves to pilots

Pilots / Applications through pilots

Detailed explanations are going to be made, after having concrete decisions on pilots and platform

Deadline: October 19th

### Quantified objectives and quantification criteria

I am expecting from each national consortium to have 2 objectives and criteria (KPIs) and we will consolidate them together.

Deadline: October 19th

## Consortium Overview

### Cooperation added value: Business level

Each non-research partners have to define their added value with up to 5 sentences.

Deadline: October 12th

In parallel with Turkish use cases Argedor will use project deliverables and knowledge to create new application areas. Particularly, our company focuses on investing Research and development on the areas of Smart community and IoT applications. With iDelta project Argedor is going to access IoT and Smart community market. Planned Turkish use case covers the loyalty based blockchain. Developing Loyalty based block chain applications take part in our company plans and goals. In order the to apply our company goals and plans, project results are going to help our company to reach the block chain market.

### Cooperation added value: Technological level

Each partner (including research institutes and universities) have to define their added value with up to 5 sentences

Deadline: October 12th

P.S: By up to 5 sentences, I do not mean sentences which are combined together with conjunctions, I mean moderate 1-2-line small statements.

Argedor has already used the existing blockchain infrastructure in different applications. Hyperledger and Fabric Ethereum based applications advanced technically and presented to some costumers in Turkey. Argedor plans to bring added value to the iDelta project on following areas;

1. Establishing Blockchain architecture and improving it.

2. Developing Middleware application services and completing application specific R & D studies. Especially developments on the security, performance, scalability, application service layer, open api integration, authorization, adaptability etc. areas will be done.

3. Developing services required for end-user applications.

4. Contributing development of national use case.

# Work Description

## Project Structure

Please think about it, and keep in mind that each itea project should have one WP for management, one for Requirement analysis, and one for Dissemination and exploitation. I will come up with also a proposal next Friday, however I am expecting national coordinators to come up with some ideas and proposals (If possible) too.

Deadline: October 5th

## Main Milestones

To be defined after concretizing WPs

Deadline: October 12th

# Rationale for Public Funding

Each national coordinator have to get in touch their public authority and get their verbal opinion about rationale for public funding and express it through ITEA portal, with 2-3 paragraphs (this is flexible you may write 5 paragraphs as well, which I do not recommend)

Deadline: October 19th

1. https://www.finextra.com/blogposting/15430/how-blockchain-can-crack-the-holy-grail-of-loyalty-programs [↑](#endnote-ref-1)