



The handling of athlete's (personal) performance data in light of growing invasiveness of sports technology is a particular challenge for sport organizations such as the international ice hockey federation (IIHF). According to IIHF officials, conflicts have emerged with the athlete's community and are likely to become more prevalent in the future. This poses a threat to the overall growth of IIHF's product.

Facing these imminent threats, IIHF challenged our students to envision a solution which can overcome privacy related responsibilities by design using blockchain technology. The "data hungry" player scouting environment was chosen as a prototypic use case to establish a simple data service based on a blockchain data governance layer. IIHF provided the students with a full data set from a past U18 men's youth world cup. Blockspirit AG and Phoenix Systems AG supported the challenge by providing [MANTIS](#) - a testnet of the fully EVM compatible public blockchain [Dragonfly](#).

The students split the challenge in two work streams. 1) For transparent access management a data governance layer was built using "[Open Zeppelin Wizard](#)" - a library for secure smart contract development with Solidity. 2) A simple data service was built which allows scouts to choose player metrics and athletes of interest for comparison.

The solution: Each query from a logged-in scout (using his/her wallet) creates an access request stored on-chain. This request becomes visible to the respective athletes (wallet sign-in) including the wallet address (scout) making the query. Athletes in turn can accept or decline data access requests which are then again stored as a state change on-chain thereby allowing/denying full or partial execution of a scout's comparison. The comparison is eventually presented to the scout in a suitable graphic visualization.

For further information please contact: Martin Zöllner, CTO IIHF martin@iihf.com / Christian Spahr, CIO and Founder Blockspirit AG christian.spahr@block-spirit.ch

