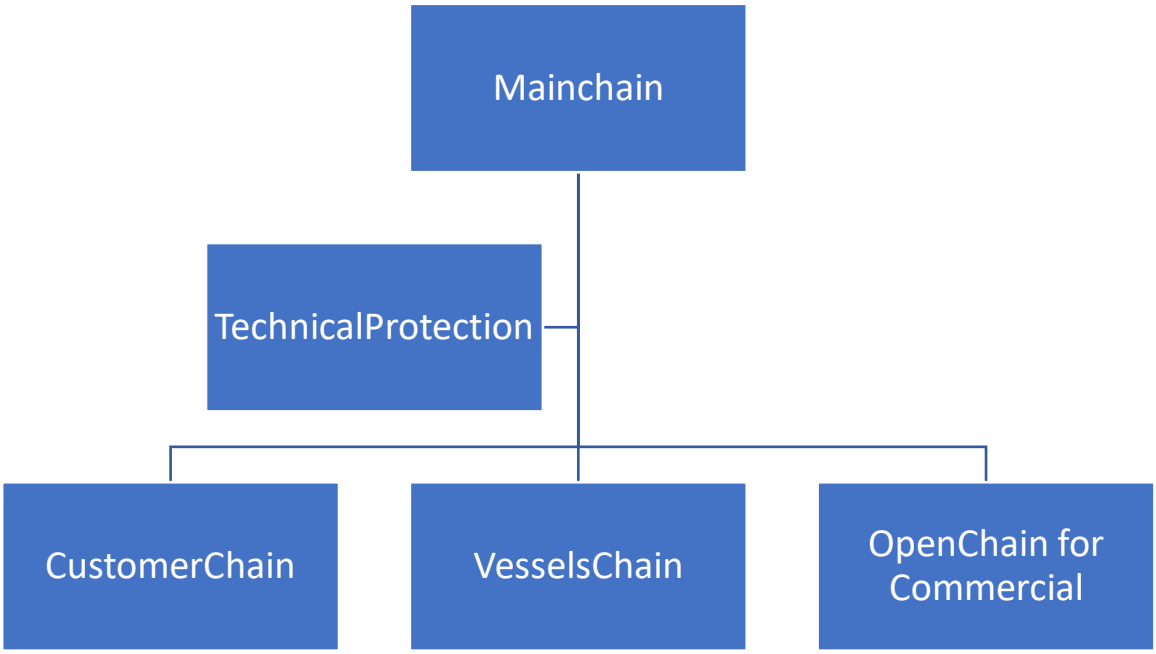
The solution is a multi-factorial information acquisition algorithm optimization with the option of an immediate forensic investigation.
The cost of refitting fishing boats varies from $ 20 to $ 100 depending on the country.

Is needed:
1x Raspberry Pi Zero wireless
1x power supply of Rasp
1x OTG cable for connecting the GPS module
1x USB to UART Converter
1x long GPS-USB antenna
optional:
1x radio antenna with Internet access for better reception in large boats

Problems I had:
1. Information transparency despite preserving the company's gadgets
2. Information security at source and transport as well as 99% availability
3. Displacement of the ship on the basis of erroneous measurements and the consequent impunity
Solutions:
Solution for problem 1:
A multi-chain based on the hyperledger blockchain is created. It has a private chain and a PKI structure behind it to strictly regulate traffic. From this chain emerge subchains, as seen in the graph. These have absolute information. In the mainchain all logs of IoT devices are stored to check them (my Mini ML is ready to make a small start when I get data) through a neural network for anomalies to keep them secure.
The subchains have customer information, ship information and the possibility of applying for and publishing certificates.



Solution 2:
The fewer sources I have, the easier it is to manipulate from the source, through the processing, to the store. We always use several independent sources at sea and on land to verify the data against each other. The transmission at sea takes place with an incremental data flow in JSON format via an RSA-AES 265 line. If several sources issue different data, this ship will be contacted. It is measured at the time, because this is massively difficult to manipulate with the current state of the art. It uses the SchiffsGPS and a Raspberry PI Zero Wireless in parallel, whereby the Rasp was technically modified

to withstand manipulation. The GPS module is connected to the NTML service, thus ensuring a correct time transmission. The logfiles are compressed in a specific pattern and transmitted incrementally in order to also compare this data with historical data (satellite imagery, other nearby vessels, etc.). If violations are suspected, a temporary justice chain will be developed to legally store the data.
You will find a Picture of this, in a other PDF.

Problem 3:
The earth is not round but an ellipsoid. Accordingly, we can not count on Lagrange but on Vincenty's formula. This massively maximizes the error correction and can be calculated in real time from the onboard Rasp (see code). Link to Wikipedia entry:

https://en.wikipedia.org/wiki/Vincenty%27s_formulae