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DEÁK DELTA IPARI KERESKEDELMI ÉS SZOLGÁLTATÓ KORLÁTOLT FELELŐSSÉGŰ TÁRSASÁG

D2 – Deliverable 2.
Blueprint of the prototype, engineering design

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1 Structure of the study

According to the project plan the process of the prototyping has been conducted in the following way:

1. Design and production of the desktop model
2. Testing the desktop model
3. Design and production of the standardized model
4. Testing of the standardized model
5. Production of the series models according to the standardized model

This engineering study has been structured according these attainments showed in Table 1. Beside the blueprints and technical descriptions of the prototype several other functioning aspects has been explained in the study that had been described in the feasibility study, as well.

Table 1. Structure of the prototyping

A./ Designing of the test version /DESKTOP MODEL/	Design of the mechanical parts of the prototype	-trapping system -housing of sensors, electronics and power supply
	Design of electronic parts (see D3)	-optical sensors for mesofauna sensoring; characterization of optical sensors; design of electronic circuits
	Choosing the materials	-metals are used for housing
	Assembly	-assemblage of mechanical and electronic parts
B./Production of test versions /DESKTOP MODEL/	Mechanical and electronic parts will be manufactured	Developing test pieces of cylinder-shape version: 1. Manufacturing housing of the insect trap by using plastic technology 2. Integrating sensors in the housing 3. Production of measuring and data acquisition electronic circuit. microcontroller software/firmware development)
	Production of mechanical test version	
	Production of electronic parts	
C. / Design of standardized model		Seriee d measuring, data collecting and processing circuits, (see D3) 5. Power Supply 6. GSM-series units (see D4)
D. / Test on running		1. Operational, safety testing, automatic implementation at bench 2. Weather-resistance and aging tests, /water temperature, humidity, etc. / Electrical studies: 3. Lab run test: (10x24 hours) 5x24-hour room continuous test of the order of 10-10 pc in parallel with data collection and GSM unit and the units with solar power supplies.
D, / Design of standardized production		production of the object machine for producing the sensors