

Financial model «local assembling and export of transceivers from Ghana»
 (calculated for period of 60 months until December 2024, calculated only for markets of Sub-Saharan Africa)

Project costs

Project stages	Duration	Start date	Finish date	Cost
Step 1. RuralNet - VHF mobile internet transceivers (IEEE 802.22 standard): replacement of antenna systems of 802.22 transceivers on the market, transition to civil VHF frequency bands in countries of region, detailed technical documentation for local assembling, certification.	365	01.01.2020	31.12.2020	\$ 20 940 388.88
Step 1. RuralNet - VHF digital TV & Radio transceivers: replacement of antenna systems of 802.22 transceivers on the market, transition to civil VHF frequency bands in countries of region, detailed technical documentation for local assembling, certification.	365	01.01.2020	31.12.2020	\$ 18 221 931.22
Step 2. NavigationNet - GNSS: replacement of antenna systems of GPS, GLONASS, BEIDOU, GALIELO, BEIDOU receivers and LOCATA transceivers on the market, transition to civil VHF frequency bands in countries of region, detailed technical documentation for local assembling, certification.	365	01.01.2020	31.12.2020	\$ 18 221 931.21
Step 3. AeroNet - VHF Avionics: replacement of antenna systems of VHF avionics on the market, transition to civil VHF frequency bands in countries of region, detailed technical documentation for local assembling, certification.	365	01.01.2020	31.12.2020	\$ 18 221 931.22
Step 4. AgriNet: creation of «Connected Farm» applications with interfaces on local languages.	365	01.01.2020	31.12.2020	\$ 1 000 000.00
Training of local engineers.	180	01.07.2020	27.12.2020	\$ 300 000.00
Construction of pilot networks in one of the countries (RuralNet, NavigationNet, AeroNet, AgriNet), demonstration to foreign partners.	90	01.10.2020	29.12.2020	\$ 1 000 000.00
Total				\$ 76 906 182.52

Note: these stages will be done by engineers of Genesys Technologies LTD. Detailed use of funds is provided on the page 9.

Projected financing

Name	Date	Amount (USD)	Period	Interest %
loan	01.01.2020	81 000 000.00	59 mths.	5.00

Note: in this financial model a 5% interest rate loan is used as a project financing.

Revenue Forecast

List of products and sales start

Name	Sales start	Direct cost	Export price	Note
VHF base station Transceiver	2021	10 000.00	30 000.00	Will be located on towers, roofs, trucks, buses, trains, ships, etc. TV & Radio transceivers will be located approximately at least each 100 km, in territories with rough landscape (mountains) at least each 40km. Internet transceivers will be located on initial stage at least each 40 km, in cities at least each 3km
Avionics Transceiver	2021	30 000.00	50 000.00	Will be sold to manufacturers of commercial unmanned aircraft systems
GNSS receiver	2021	300.00	500.00	Spoofing-resistant 1 cm level GNSS receivers combining GPS, GLONASS, BEIDOU, GALILEO and LOCATA on VHF frequencies. Will be installed in unmanned aircraft systems, self-driving cars, trucks, tractors, unmanned surface vehicles, etc.
Transceiver Lite	2021	32.00	35.00	Will be installed in various accessories, smartphones, tablets, TV & radio set top boxes, various sensors, smartmeters, wearables, etc.

Sales forecast (number of units)

Product	Units	2020 year	2021 year	2022 year	2023 year	2024 year
VHF base station Transceiver	pcs	0	15 051	16 556	18 211	20 032
Avionics Transceiver	pcs	0	1 411	1 552	1 707	1 878
GNSS receiver	pcs	0	50 000	55 000	60 500	66 550
Transceiver Lite	pcs	0	10 000 000	11 000 000	12 100 000	13 310 000

Revenue forecast

Item	2020 year	2021 year	2022 year	2023 year	2024 year
VHF base station Transceiver		451 530 000.00	496 680 000.00	546 330 000.00	600 960 000.00
Avionics Transceiver		70 550 000.00	77 600 000.00	85 350 000.00	93 900 000.00
GNSS receiver		25 000 000.00	27 500 000.00	30 250 000.00	33 275 000.00
Transceiver Lite		350 000 000.00	385 000 000.00	423 500 000.00	465 850 000.00
TOTAL		834 730 000.00	918 200 000.00	1 010 005 000.00	1 110 987 500.00

Personnel plan

Position	Quant.	Cost (USD)	Payments
Administration			
CEO	1	71 650.00	Monthly
CFO	1	32 917.00	Monthly
Admin Officer 1	4	9 500.00	Monthly
Admin Officer 2	4	7 166.00	Monthly
Admin Officer 3	4	5 333.00	Monthly
Translator	8	7 833.00	Monthly
Production			
Chief Security Supervisor	1	11 166.00	Monthly
Chief Design Engineer Adviser	1	40 834.00	Monthly
Software Development director	1	35 000.00	Monthly
Senior Supervising Electrical Engineer	4	30 000.00	Monthly
Principal design engineer	4	23 834.00	Monthly
Senior RF Systems engineer	8	22 500.00	Monthly
Field test RF System Engineer	8	20 000.00	Monthly
Senior electronics designer engineer	12	19 166.00	Monthly
Test Engineering Supervisor	8	14 500.00	Monthly
Application engineer V	12	19 166.00	Monthly
Designer Engineer IV (PCB)	12	16 166.00	Monthly
Electrical Engineer IV	12	15 834.00	Monthly
Electric/Electronics Technician III	12	9 334.00	Monthly
Electric/Electronics Technician II	16	8 000.00	Monthly
EMC / EMI Test Engineer	8	18 334.00	Monthly,
Field test RF System Technician II	12	12 168.00	Monthly
Test technician/engineer	12	10 834.00	Monthly,
Senior Embedded S/W engineer	8	19 166.00	Monthly,
Software configuration manager	8	18 332.00	Monthly,
Software build/release engineer	8	16 166.00	Monthly,
Network administrator	8	15 834.00	Monthly,
Software engineer V	12	12 666.00	Monthly,
Software engineer II	12	7 166.00	Monthly
Mathematician, MATHLAB specialist	8	14 500.00	Monthly
CAD design manager	4	17 500.00	Monthly
CAD Designer Engineer III	8	15 666.00	Monthly
AutoCAD designer/drafter II	8	11 166.00	Monthly
Machinist III	4	8 666.00	Monthly
Machinist II	4	7 832.00	Monthly
Sheet metal Mechanic III	8	6 834.00	Monthly
Electronics Assembler	300	3 583.00	Monthly
Marketing			
Business Development Manager	1	15 000.00	Monthly
International Marketing manager	5	4 750.00	Monthly
Local marketing manager	10	3 000.00	Monthly
Sales manager	10	2 000.00	Monthly
Technical support manager	10	2 000.00	Monthly

Total personnel: 601 (273 American specialists, 328 local specialists)

General expenses

Item	Amount (USD)	Payments
Production		
Rent of Office and Local assembly facility	360 000.00	Yearly

Profit & Loss

Item	2020 year	2021 year	2022 year	2023 year	2024 year
Sales revenues		897 080 000.00	986 780 000.00	1 085 430 000.00	1 193 985 000.00
Sales losses					
Taxes on sales					
Net sales		897 080 000.00	986 780 000.00	1 085 430 000.00	1 193 985 000.00
Raw materials and components		447 322 033.90	492 050 847.46	541 245 762.71	595 377 118.64
Direct labor costs					
Cost of goods sold		447 322 033.90	492 050 847.46	541 245 762.71	595 377 118.64
Gross profit		449 757 966.10	494 729 152.54	544 184 237.29	598 607 881.36
Other taxes					
Administrative expenses					
Production expenses		305 084.75	305 084.75	305 084.75	305 084.75
Marketing expenses					
Salary of administrative personnel		3 062 724.00	3 062 724.00	3 062 724.00	3 062 724.00
Salary of production personnel		55 862 544.00	55 862 544.00	55 862 544.00	55 862 544.00
Salary of marketing personnel		1 305 000.00	1 305 000.00	1 305 000.00	1 305 000.00
Total operating expenses		60 535 352.75	60 535 352.75	60 535 352.75	60 535 352.75
Depreciation					
Interest expenses	4 050 000.00	4 050 000.00	4 050 000.00	4 050 000.00	3 712 500.00
Total non-operating expenses	4 050 000.00	4 050 000.00	4 050 000.00	4 050 000.00	3 712 500.00
Other revenues					
Other expenses	65 174 730.95				
Losses from prior periods		6 922 473.09	6 922 473.09	6 922 473.09	6 922 473.09
Profit before tax	-69 224 730.95	385 172 613.36	430 143 799.80	479 598 884.54	534 360 028.61
Total expenses allocated to profit					
Effect of operating with foreign currency					
Taxable profit		378 250 140.26	423 221 326.70	472 676 411.45	527 437 555.52
Tax on profit		75 650 028.05	84 644 265.34	94 535 282.29	105 487 511.10
Net profit	-69 224 730.95	309 522 585.30	345 499 534.46	385 063 602.25	428 872 517.51

Cash flow

Item	2020 year	2021 year	2022 year	2023 year	2024 year
Cash receipts from customers		897 080 000.00	986 780 000.00	1 085 430 000.00	1 193 985 000.00
Cash paid to suppliers		527 840 000.00	580 620 000.00	638 670 000.00	702 545 000.00
Direct labor paid					
Total direct costs		527 840 000.00	580 620 000.00	638 670 000.00	702 545 000.00
General expenses paid		360 000.00	360 000.00	360 000.00	360 000.00
Salary paid		60 230 268.00	60 230 268.00	60 230 268.00	60 230 268.00
Total operating expenses		60 590 268.00	60 590 268.00	60 590 268.00	60 590 268.00
Short term funds					
Interest receipts					
Other inflows					
Other outflows					
Taxes paid		69 340 774.30	83 894 745.57	93 711 030.88	104 512 950.37
Net cash from operating activities		239 308 957.70	261 674 986.43	292 458 701.12	326 336 781.63
Purchase of property, plant and equipment					
Other start-up expenses paid	76 906 182.52				
Proceeds from sale of assets					
Purchase of securities					
Proceeds from sale of securities					
Interest received					
Net cash from investment activities	-76 906 182.52				
Proceeds from issue of share capital					
Proceeds from debt	81 000 000.00				
Repayment of debt					81 000 000.00
Interest paid	4 050 000.00	4 050 000.00	4 050 000.00	4 050 000.00	3 712 500.00
Lease payments					
Dividends paid					
Net cash from financing activities	76 950 000.00	-4 050 000.00	-4 050 000.00	-4 050 000.00	-84 712 500.00
Cash at beginning of period		43 817.48	235 302 775.18	492 927 761.61	781 336 462.73
Cash at end of period	43 817.48	235 302 775.18	492 927 761.61	781 336 462.73	1 022 960 744.37

Balance sheet

Item	2020 year	2021 year	2022 year	2023 year	2024 year
Cash	43 817.48	235 302 775.18	492 927 761.61	781 336 462.73	1 022 960 744.37
Account receivable					
Inventories					
Work in progress					
Finished goods					
Short term investments					
Prepaid expenses (Short term)	11 731 451.57	85 995 079.18	173 869 627.20	270 524 528.33	376 772 764.20
Total current assets	11 775 269.05	321 297 854.35	666 797 388.81	1 051 860 991.06	1 399 733 508.57
Fixed assets					
Accumulated depreciation					
Net fixed assets:					
Land					
Buildings					
Plant and equipment					
Prepaid expenses (Long term)					
Other assets					
Investments in progress					
Other long term investments					
Leased property					
TOTAL ASSETS	11 775 269.05	321 297 854.35	666 797 388.81	1 051 860 991.06	1 399 733 508.57
Accrued taxes					
Short term loans					
Accounts payable					
Advances from customers					
Total current liabilities					
Long term debt	81 000 000.00	81 000 000.00	81 000 000.00	81 000 000.00	
Ordinary shares issued					
Preferred shares issued					
Share premium account					
Reserves					
Revaluation reserve					
Retained earnings	-69 224 730.95	240 297 854.35	585 797 388.81	970 860 991.06	1 399 733 508.57
Total shareholders equity	-69 224 730.95	240 297 854.35	585 797 388.81	970 860 991.06	1 399 733 508.57
TOTAL LIABILITIES	11 775 269.05	321 297 854.35	666 797 388.81	1 051 860 991.06	1 399 733 508.57

Financial ratios

Item	2020 year	2021 year	2022 year	2023 year	2024 year
Current ratio (CR), %					1 720.11
Acid test ratio (QR), %					1 720.11
Net working capital (NWC), USD	43 881 910.46	179 321 471.68	508 331 571.11	875 261 642.29	1 202 931 323.64
Net working capital (NWC), USD	43 881 910.46	179 321 471.68	508 331 571.11	875 261 642.29	1 202 931 323.64
Stock turnover (ST)					
Average collection period (CP)					
Creditor/purchases ratio (CPR)					
Net working capital turnover (NCT)		5.00	1.94	1.24	0.99
Fixed assets turnover (FAT)					
Total assets turnover (TAT)		5.00	1.94	1.24	0.93
Total debt to total assets (TD/TA), %	184.59	45.17	15.93	9.25	5.81
L-term debt to total assets (LTD/TA), %	184.59	45.17	15.93	9.25	
L-term debt to fixed assets (LTD/FA), %					
Total debt to equity (TD/EQ), %	-218.22	82.38	18.95	10.20	6.17
Times interest earned (TIE), times	-16.09	96.10	107.21	119.42	144.94
Gross profit margin (GPM), %		50.14	50.14	50.14	50.14
Operating profit margin (OPM), %		42.94	43.59	44.19	44.75
Net profit margin (NPM), %		34.50	35.01	35.48	35.92
Return on current assets (RCA), %	-157.75	172.61	67.97	43.99	33.58
Return on fixed assets (RFA), %					
Return on investment (ROI), %	-157.75	172.61	67.97	43.99	33.58
Return on shareholders' equity (ROE), %	186.50	314.81	80.85	48.48	35.65
Earning per ordinary share (EPOS), USD					
Earning per ordinary share (EPOS), USD					
Dividends per ordinary share (DPOS), USD					
Dividends per ordinary share (DPOS), USD					
Ordinary dividends coverage (ODC), pas					
Total assets per ordinary share (TAOS), USD					
Total assets per ordinary share (TAOS), USD					
Price to earnings (P/E), times					

Use of Funds (replacement of antenna systems of VHF transceivers on the market, transition to civil VHF frequency bands in countries of region, technical documentation for local assembling, certification)

Total costs are as follows:

Lab equipment	\$ 23 977 603.52
Software	\$ 4 518 579.00
Salary of engineers	\$ 47 110 000.00
Total	\$ 75 606 182.52

Lab equipment costs:

Lab Equipment (4 Transceivers 15-430 MHZ band) Project Costs					
Estimated Cost Breakdown					
Description			Unit Price	QTY (req.)	Cost
Test measurement tools					
Oscilloscopes	Tabletop	LabMaster 9CZi-A Master Control Module with two LabMaster 920SZi-A Slave Acquisition Modules	\$421 000.00	8	\$ 3 368 000.00
		LeCroy WaweMaster 816Zi series	\$ 69 500.00	12	\$ 834 000.00
		HP Agilent Infiniium DSAX92004A 20/16GHz	\$ 286 000.00	12	\$ 3 432 000.00
		MATLAB - Standard Digital Analysis Package	\$ 4 010.00	8	\$ 32 080.00
		User Defined Function N5430A	\$ 2 371.00	8	\$ 18 968.00
		EZJIT Plus jitter analysis software - installed	\$ 8 504.00	12	\$ 102 048.00
		Precision Probe for 90000A series oscilloscopes	\$ 4 000.00	12	\$ 48 000.00

		InfiniiScan - installed	\$ 5 500.00	12	\$ 66 000.00
		InfiniiSim Advanced - installed	\$ 12 000.00	12	\$ 144 000.00
	Handheld	Fluke 225C/003 200 MHz Color Scope Meter	\$ 3 416.32	12	\$ 40 995.84
Spectrum Analyzer	Tabletop	E4448A PSA Series Spectrum Analyzer	\$ 273 174.00	12	\$ 3 278 088.00
		N5222A PNA Microwave Network Analyzer	\$ 97 239.00	8	\$ 777 912.00
		Option 419 4-Ports, Dual-Source, Configurable Test Set, Extended Power Range	\$ 133 510.00	8	\$ 1 068 080.00
		R&S FSW26-B4-B8-B24-B160 20Hz - 26.5GHz Spectrum Analyzer	\$ 170 000.00	8	\$ 1 360 000.00
	Handheld	N9923A FieldFox Handheld RF Vector Network Analyzer, 4/6 GHz	\$ 15 937.00	8	\$ 127 496.00
		Rohde & Schwarz FSH828 Spectrum Analyzer 100 kHz to 8 GHz. With Preamplifier, Tracking Generator, Internal VSWR Bridge.	\$ 21 610.00	8	\$ 172 880.00
	Tabletop	R&S SMBV100A-B10-B106-B55-B90-K22-K23-K48-K49-K52-K54-K61-K62 (GPS/GLONAS/GALILEO) Vector Signal Generator 9 kHz - 6 GHz	\$ 68 400.00	12	\$ 820 800.00
		SMBV-K44(GPS)/K244/ /-K65/-K66(Galileo)/-K266/-K91/-K92/-K93/-K94(Glonas)/-K294/-K96 GPS/A-GPS/GPS P-Code/Galileo/GNSS/GLONASS (GNSS Simulator for the R&S@SMBV100A Vector Signal Generator, GPS/GLONAS/GALILEO)			
		SMBV100A-B106-B10-B92-K22-K23-K40-K46-K47-K48-K49-K50-K51-K54-K6-C5-R5, (GPS/GLONAS/GALILEO)	\$ 77 995.00	12	\$ 935 940.00
		C5 - SMBV100A Five years of standard depot calibration coverage (GPS/GLONAS/GALILEO)	\$ 740.00	12	\$ 8 880.00
		R3 SMBV100A 3 year repair warranty (GPS/GLONAS/GALILEO)	\$ 1 110.00	12	\$ 13 320.00
		R&S SMU200A-B10-B13-B106-B203-K15-K49 (GPS/GLONAS/GALILEO) Vector Signal Generator	\$ 94 590.00	12	\$ 1 135 080.00
Logic Analyzer	Tabletop	Agilent 16823A 102CH Logic Analyzer w/ Pattern generator channels	\$ 31 333.00	16	\$ 501 328.00

Signal	Tabletop	Signal Generator R&S@SMA100A	\$ 28 500.00	16	\$ 456 000.00
Arbitrary	Tabletop	290 Series 4 Channel, 100 MS/s Arbitrary Waveform Generator and Waveform Manager Plus Software. Compact Flash Memory Card and USB Card Reader/Writer	\$ 5 325.00	12	\$ 63 900.00
Multimeters	Tabletop	Agilent / HP 3458A Multimeter 8.5 Digits	\$ 8 195.00	12	\$ 98 340.00
Semiconductor	Tabletop	Agilent B1505A, fully configured 1500 A/10kV model, Analyzer/Curve Tracer	\$ 220 000.00	8	\$ 1 760 000.00
Multimeters	Handheld	Fluke 289 fvf	\$ 620.00	16	\$ 9 920.00
Freq	Tabletop	Agilent 53147A Microwave Counter/Power Meter/DVM, 20 GHz	\$ 13 898.00	16	\$ 222 368.00
LCR	Tabletop	E4982A LCR Meter, 1 MHz to 3 GHz	\$ 31 667.00	12	\$ 380 004.00
Servers and Workstations					
Network server storage		HP 10636 G2 Pallet Universal Rack	\$ 1 443.00	4	\$ 5 772.00
Firewall, first level		Cisco ASA 5520	\$ 3 795.00	4	\$ 15 180.00
		Cisco IOS for ASA 5520, Cisco Adaptive Security Appliance Software (Price after Cisco agreement)	\$ -	4	\$ -
Second level switch		Cisco Catalyst 2960-S Series Switches	\$ 2 400.00	8	\$ 19 200.00
Third level switch		Cisco Catalyst series 3560	\$ 2 693.00	4	\$ 10 772.00
Server	HP ProLiant DL120 G7	HP ProLiant DL120 G7 Performance - Xeon E3-1240 3.3 GHz, no monitor, OS Windows 2008 R2	\$ 1 531.00	4	\$ 6 124.00
BuckUp Server	HP ProLiant DL120 G7	HP ProLiant DL120 G7 Performance - Xeon E3-1240 3.3 GHz, no monitor, OS Windows 2008 R3	\$ 1 531.00	4	\$ 6 124.00
Virtualization Servers	HP ProLiant DL380 G7	HP ProLiant DL380 G7 Performance - Xeon X5690 3.46 GHz Server - rack-mountable - 2U - 2-way - 2 x Xeon X5690 / 3.46 GHz - RAM 12 GB - SAS - hot-swap 2.5" - no HDD - DVD-RW - ATI ES1000 - Gigabit Ethernet - Monitor : none, OS ESXi 4	\$ 8 007.00	8	\$ 64 056.00
	SmartUPS	APC Smart-UPS RT 5000VA RM, Main servers and EDA workstations power backup	\$ 4 049.00	40	\$ 161 960.00

Workstation	HP Z800 Windows® Workstation FF825AV	EDA Workstation, Electronic design workstation-simulator, CAD workstation	\$ 26 238.00	12	\$ 314 856.00
	HP Z800 Windows® Workstation FF825AV	EDA/CAD workstation, Electronic design workstation-simulator, CAD workstation	\$ 8 048.00	12	\$ 96 576.00
	HP Z800 Workstation	CAD/General workstation, Electronic design workstation-simulator, CAD workstation	\$ 3 700.00	40	\$ 148 000.00
	HP Z800 Workstation	Workstation extended	\$ 4 700.00	32	\$ 150 400.00
	HP ZR24w 24-inch S-IPS LCD Monitor	S/W workstation and network equipment	\$ 425.00	48	\$ 20 400.00
	HP USB 2-Button Laser Mouse	S/W workstation and network equipment	\$ 16.00	32	\$ 512.00
	HP USB Standard Keyboard	S/W workstation and network equipment	\$ 30.00	32	\$ 960.00
	HP Webcam HD-4110	S/W workstation and network equipment	\$ 80.00	32	\$ 2 560.00
	Blackwire 600	S/W workstation and network equipment, Plantronics C620 - headset	\$ 78.99	32	\$ 2 527.68
	APC Back-UPS Pro 1500VA	Smart UPS, Network Power Backup	\$ 400.00	32	\$ 12 800.00
	Mac book pro 17 inch	iOS workstation, Apple iOS Developer equipment	\$ 2 499.00	12	\$ 29 988.00

	VMware vSphere 5 Enterprise Plus	Virtualization kit	\$ 3 250.00	16	\$ 52 000.00
	VMware vCenter Server Standard	Virtualization Server kit	\$ 2 675.00	4	\$ 10 700.00
Lab Furniture/Tools					
		Complete office modular furniture set	\$ 1 200.00	160	\$ 192 000.00
		Complete set of lab furniture	\$12 200.00	48	\$ 585 600.00
		Prototype PCB soldering/rework station, SMD rework / SMD prototype PCB assembly	\$ 45 000.00	8	\$ 360 000.00
		Every day hand tools, specialty use	\$ 3 500.00	60	\$ 210 000.00
		Drill press, TABLE RF-35	\$ 506.00	8	\$ 4 048.00
		Mill & Drill Combinations Machine Type	\$ 6 175.00	12	\$ 74 100.00
		CNC Milling Machines & CNC Controllers, Vectrax, CL948 FGR 8035	\$ 17 995.00	8	\$ 143 960.00
Estimated total					\$23977603.52

Software costs:

Development Software Cost (4 Transceivers 15-430 MHZ band) Project Costs						
Description			update subscript ion times	Unit Cost	QTY (licens es)	Cost
ECAD, (Circuit capture-simulators)						
	National Instrument	779826-35, NI Ultiboard Power Pro Edition, Includes Multisim, Uniboard, and 2 Year update subscription	2	\$ 5 499.00	28	\$ 307 944.00
		NI GPIB-USB-HS, GPIB Controller for Hi-Speed USB	1	\$ 565.00	15	\$ 8 475.00
	Altium (Protel)	Altium Designer (full)	1	\$ 5 500.00	48	\$ 264 000.00
		12 month global subscription	1	\$ 2 340.00	48	\$ 112 320.00
		NanoBoard NB2 reconfigurable development platform	1	\$ 1 995.00	28	\$ 55 860.00
	Labcenter Electronics Ltd	Proteus Virtual System Modelling Platinum Edition	1	\$ 6 592.00	40	\$ 263 680.00
Matlab, Single License			2	\$ 3 195.00	20	\$ 127 800.00
Drawings (mechanical)						
	SLD-SFT-4	SolidWorks Premium 3D CAD Design, all the mechanical design, verification, PDM, and communication tools in one package.	2	\$ 7 995.00	20	\$ 319 800.00
	SLD-SFT-4,	SolidWorks Premium Subscription Service, Initial 2 Year includes: All Major Releases in a 24 month period with periodic internet download for the most current releases, telephone support with CADimensions, Inc. and SolidWorks.	2	\$ 1 995.00	20	\$ 79 800.00
						\$ -

	SLD-SFT-5-AP	SolidWorks Simulation Premium - Single User License	1	\$ 10 995.00	20	\$ 219 900.00
	SLD-MNT-5-I-AP	Solidworks Simulation Premium Subscription Service, Initial 2 Year	2	\$ 3 575.00	20	\$ 143 000.00
Computer-aided software engineering (CASE)						\$ -
	The application specific set of programming automated tools, Include 2 necessarily licenceses and updates		2	\$ 32 700.00	40	\$ 2 616 000.00
Estimated total						\$ 4 518 579.00

Salary of engineers:

4 Transceivers 15-430 MHZ band Project - Team Salary (preliminary)						
Position	Division	Specialists req.	Salary recommended (median, without bonuses)			
			Yearly	Monthly	Hourly	Team Year Cost
CEO		1	\$ 860 000.00	\$ 71 666.67	\$ 413.46	\$ 860 000.00
CFO		1	\$ 790 000.00	\$ 65 833.33	\$ 379.81	\$ 790 000.00
Admin. Officer 1		4	\$ 114 000.00	\$ 9 500.00	\$ 54.81	\$ 456 000.00
Admin. Officer 2		4	\$ 86 000.00	\$ 7 166.67	\$ 41.35	\$ 344 000.00
Admin. Officer 3		4	\$ 64 000.00	\$ 5 333.33	\$ 30.77	\$ 256 000.00
Translator		8	\$ 94 000.00	\$ 7 833.33	\$ 45.19	\$ 752 000.00
Chief Security Supervisor		1	\$ 134 000.00	\$ 11 166.67	\$ 64.42	\$ 134 000.00
Chief Design Engineer Adviser		1	\$ 490 000.00	\$ 40 833.33	\$ 235.58	\$ 490 000.00
Software Development director	Software department (S/W)	1	\$ 420 000.00	\$ 35 000.00	\$ 201.92	\$ 420 000.00
Senior Supervising Electrical Engineer	Electronic department (H/W)	4	\$ 360 000.00	\$ 30 000.00	\$ 173.08	\$ 1 440 000.00
Principal design engineer	H/W	4	\$ 286 000.00	\$ 23 833.33	\$ 137.50	\$ 1 144 000.00
Senior RF Systems engineer	H/W	8	\$ 270 000.00	\$ 22 500.00	\$ 129.81	\$ 2 160 000.00
Field test RF System Engineer V	H/W	8	\$ 240 000.00	\$ 20 000.00	\$ 115.38	\$ 1 920 000.00
Senior electronics designer engineer	H/W	12	\$ 230 000.00	\$ 19 166.67	\$ 110.58	\$ 2 760 000.00
Test Engineering Supervisor	H/W	8	\$ 174 000.00	\$ 14 500.00	\$ 83.65	\$ 1 392 000.00
Application engineer V	H/W	12	\$ 230 000.00	\$ 19 166.67	\$ 110.58	\$ 2 760 000.00
Designer Engineer IV (PCB)	H/W	12	\$ 194 000.00	\$ 16 166.67	\$ 93.27	\$ 2 328 000.00
Electrical Engineer IV (Power electronic)	H/W	12	\$ 190 000.00	\$ 15 833.33	\$ 91.35	\$ 2 280 000.00
Electric/Electronics Technician III	H/W	12	\$ 112 000.00	\$ 9 333.33	\$ 53.85	\$ 1 344 000.00
Electric/Electronics Technician II	H/W	16	\$ 96 000.00	\$ 8 000.00	\$ 46.15	\$ 1 536 000.00
EMC / EMI Test Engineer	H/W	8	\$ 220 000.00	\$ 18 333.33	\$ 105.77	\$ 1 760 000.00
Field test RF System Technician II	H/W	12	\$ 146 000.00	\$ 12 166.67	\$ 70.19	\$ 1 752 000.00

Test technician/engineer	H/W	12	\$ 130 000.00	\$ 10 833.33	\$ 62.50	\$ 1 560 000.00
Senior Embedded S/W engineer	S/W	8	\$ 230 000.00	\$ 19 166.67	\$ 110.58	\$ 1 840 000.00
Software configuration manager	S/W	8	\$ 220 000.00	\$ 18 333.33	\$ 105.77	\$ 1 760 000.00
Software build/release engineer	S/W	8	\$ 194 000.00	\$ 16 166.67	\$ 93.27	\$ 1 552 000.00
Network administrator	S/W	8	\$ 190 000.00	\$ 15 833.33	\$ 91.35	\$ 1 520 000.00
Software engineer V	S/W	12	\$ 152 000.00	\$ 12 666.67	\$ 73.08	\$ 1 824 000.00
Software engineer II	S/W	12	\$ 86 000.00	\$ 7 166.67	\$ 41.35	\$ 1 032 000.00
Mathematician, MATHLAB specialist	S/W	8	\$ 174 000.00	\$ 14 500.00	\$ 83.65	\$ 1 392 000.00
CAD design manager	Mechanical/Prototype department (M/P)	4	\$ 210 000.00	\$ 17 500.00	\$ 100.96	\$ 840 000.00
CAD Designer Engineer III	M/P	8	\$ 188 000.00	\$ 15 666.67	\$ 90.38	\$ 1 504 000.00
AutoCAD designer/drafter II	M/P	8	\$ 134 000.00	\$ 11 166.67	\$ 64.42	\$ 1 072 000.00
Machinist III	M/P	4	\$ 104 000.00	\$ 8 666.67	\$ 50.00	\$ 416 000.00
Machinist II	M/P	4	\$ 94 000.00	\$ 7 833.33	\$ 45.19	\$ 376 000.00
Sheet metal Mechanic III	M/P	8	\$ 82 000.00	\$ 6 833.33	\$ 39.42	\$ 656 000.00
Electronics Assembler	M/P	8	\$ 86 000.00	\$ 7 166.67	\$ 41.35	\$ 688 000.00
Total head count		273	For a ONE year total			\$ 47 110 000.00

Investment efficiency

Project costs: \$ 76 906 182.52

Projected financing:

Name	Date	Amount (USD)	Period	Interest %
loan	01.01.2020	81 000 000.00	59 mths.	5.00

Cash flow criteria:

Criteria	US Dollar
Pay back period - PB, mths.	17
Average rate of return - ARR, %	240.58
Net present value - NPV	892 849 412
Profitability index - PI	12.03
Internal rate of return - IRR, %	268.70
Modified rate of return - MIRR, %	64.45

Cash flow criteria calculation period - 60 months.