IT-SIMPLICITY SOLUTIONS BV

Advantage of FTTH / FTTX dedicated network design software based on Autocad.

FTTH / FTTX Project process flow.

Simply Design, Build & Maintain FTTH / FTTX networks
Designs are made in minutes
Save approx 20% on drop cable
Save approx 2% on trenching

Real FTTH / FTTX network design & engineering software.
Faster and more flexible than any GIS.

CONTENT

- FTTH / FTTX design & engineering software

- 30 years of project experience

- Advantages of Autocad based network design

- FTTH / FTTX OSP network design/engineering process flow

- Software summary

IT-SIMPLICITY

FTTH / FTTX network design & engineering software solutions

Design   *Build*   *Operate & Maintain*

NetDesign

FTTH Design

Design of detailed FTTH-networks
►*AutoCAD® based and creation of all required drawings and network related quantities.*

NetOptimus

FTTH Automatic design

Cost optimized network design
►*Automatic, based on material & installation costs*

NetProject

Project Management

Simplifies complex networks
► *Managing of all labour, quantities & costs. Material management & process control*

NetID

Network Registration

Registration & Documentation
►*Creation of fibre connections / jointing reports. Integrated GIS.*

IT-SIMPLICITY

FTTH / FTTX software

**30 years of project experience, millions of customer connections!
Dedicated software for FTTH / FTTX OSP networks:**

FTTH / FTTX network design	NetDesign based on Autocad
	Network modelling & high level designs
	Detailed,installer ready & as-built drawings
	NetOptimus
	Automatic cost optimized network design
Project management	NetProject
Registration / Maintenance	NetID
	Fibre schematics, FTU planner
	As-built changes

Advantages of NetDesign:

Real design software, faster and more flexible than GIS.

NetDesign functions to easily create any FTTX design.

Based on Autocad, the World leader in CAD software.

An experienced CAD designer can start working with NetDesign within minutes.

Autocad is best equiped for:

Usage of our easy customizable: legenda's, symbol libraries, FTTH / FTTX menu's.

The creation of any required drawings for any FTTH / FTTX project like:
Permits / installation / construction / specials / road-crossing drawings etc. etc.
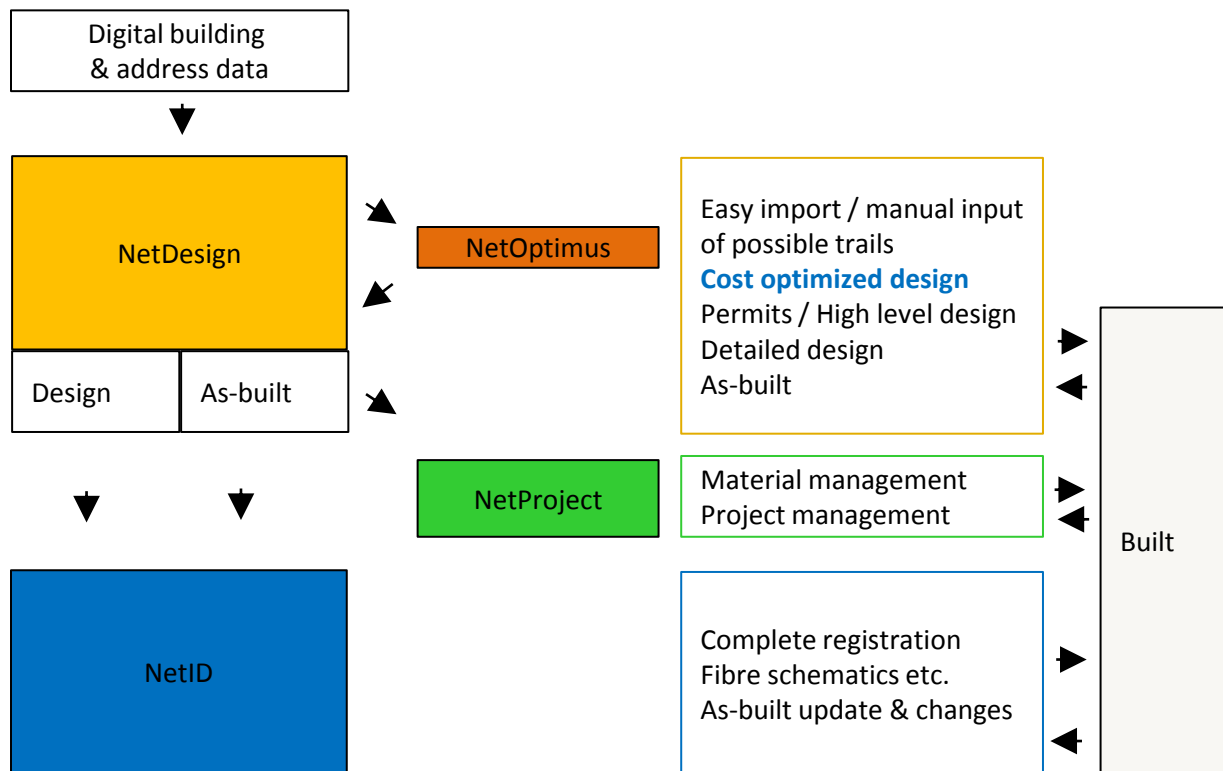
Flexible text and labelling, fully detailed network designs.

FTTH / FTTX OSP network design / engineering process flow

Digital building & address data

NetDesign
- Design
- As-built

NetID

NetOptimus

NetProject

Easy import / manual input of possible trails
Cost optimized design
Permits / High level design
Detailed design
As-built

Material management
Project management

Complete registration
Fibre schematics etc.
As-built update & changes

Built

FTTH / FTTX OSP network design / engineering process flow

NetDesign Input preparation	01: Import addresses and houses 02: Draw mainlines and road-crossings 03: Move number to façade of house; create drop lines; create FTU's 04: Create line-segments 05: Export to NetOptimus
NetOptimus Automatic cost optimized design	06: Import and check input data 07: Set cost and design parameters 08: Create and show best design 09: Export to NetDesign
NetDesign Detailed Design	10: Import NetOptimus cable routes and DP locations 11: Create DP's and drop-cable's. Create all labelling per DP. 12: Export to NetID
NetID Fibre schematics	13: Import NetDesign data 14: Prepare feeders 15: Create Fibre-schematics 16: Update As-built data from NetDesign

(01) Engineer: Import data or manually insert addresses and houses

(02) Engineer: import data or manually draw mainlines and road-crossings
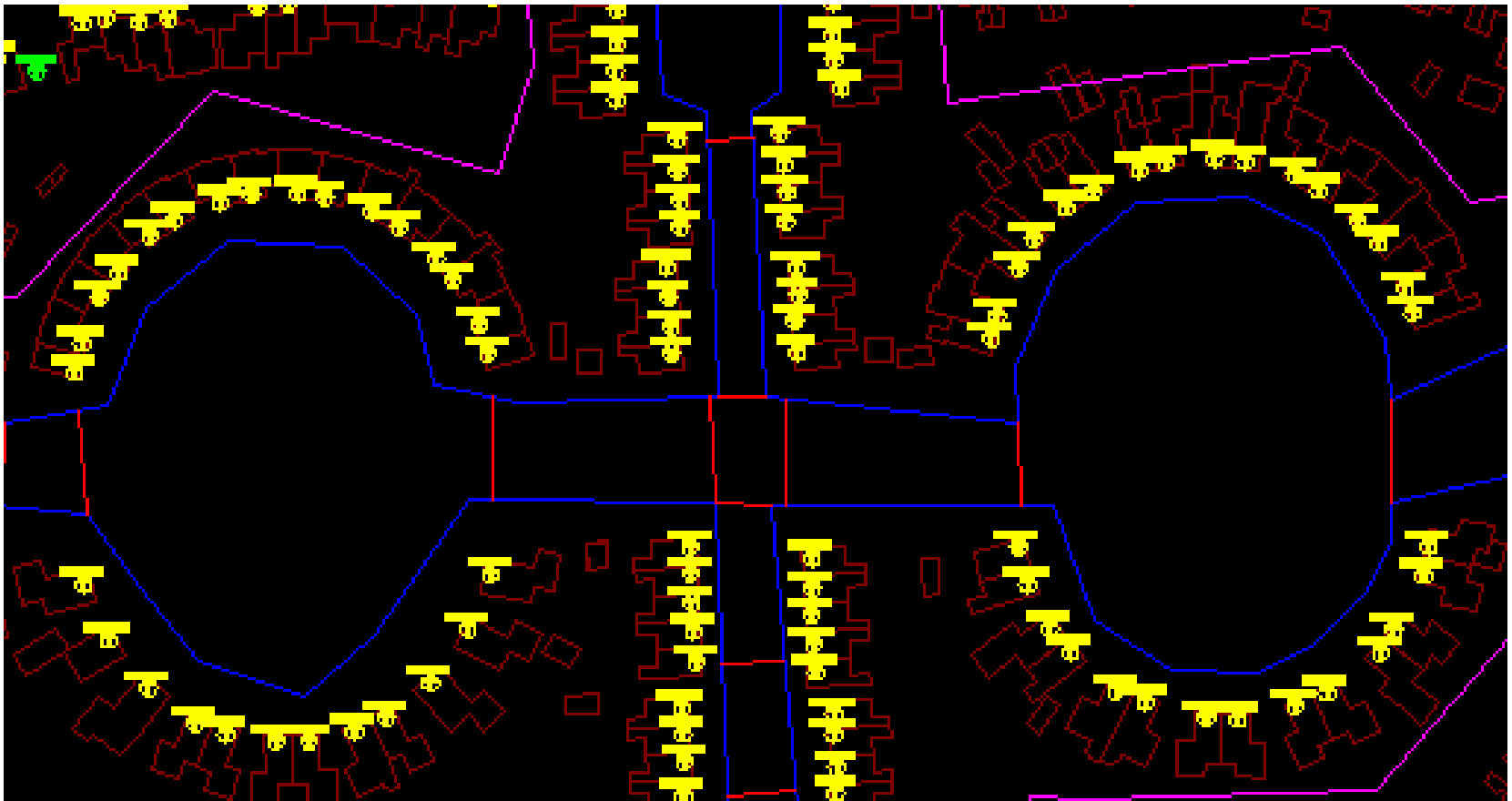
(03) Automatic: number to façade of house, garden/drop lines, FTU symbols
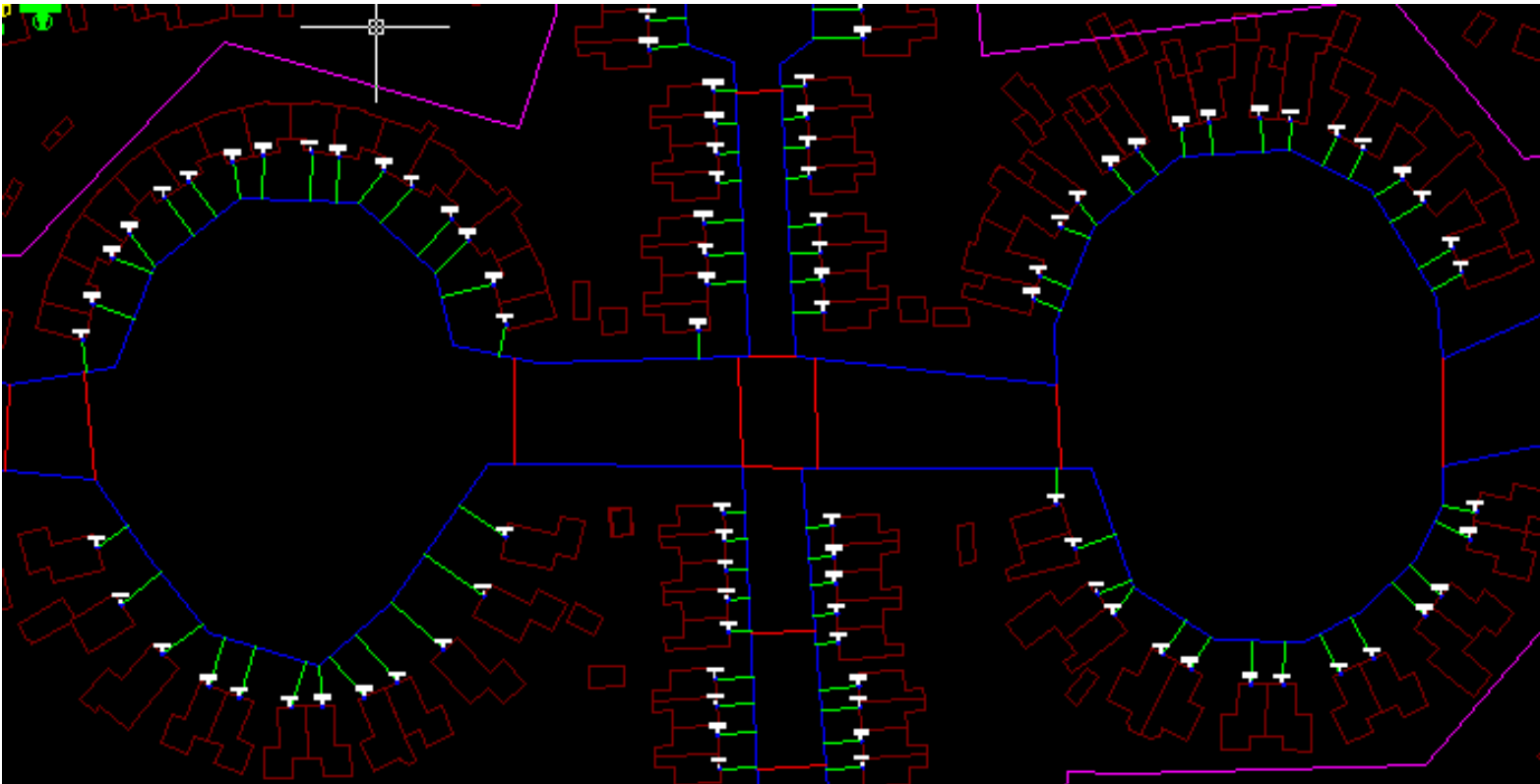
(04) Automatic: create & correct line-segments

(05) Automatic: export drawing to NetOptimus

FTTH / FTTX OSP network design / engineering process flow

NetDesign **Input preparation**	01: Import addresses and houses 02: Draw mainlines and road-crossings 03: Move number to façade of house; create drop lines; create FTU's 04: Create line-segments 05: Export to NetOptimus
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NetDesign **Detailed Design**	10: Import NetOptimus cable routes and DP locations 11: Create DP's and drop-cable's. Create all labelling per DP. 12: Export to NetID
NetID **Fibre schematics**	13: Import NetDesign data 14: Prepare feeders 15: Create Fibre-schematics 16: Update As-built data from NetDesign

(06) Automatic: import and check import data

(07) Engineer: set the project material & installation unit costs
(08) Automatic: all possible designs & costs are listed. Best design is shown.
(09) Automatic: export a selected design

FTTH / FTTX OSP network design / engineering process flow

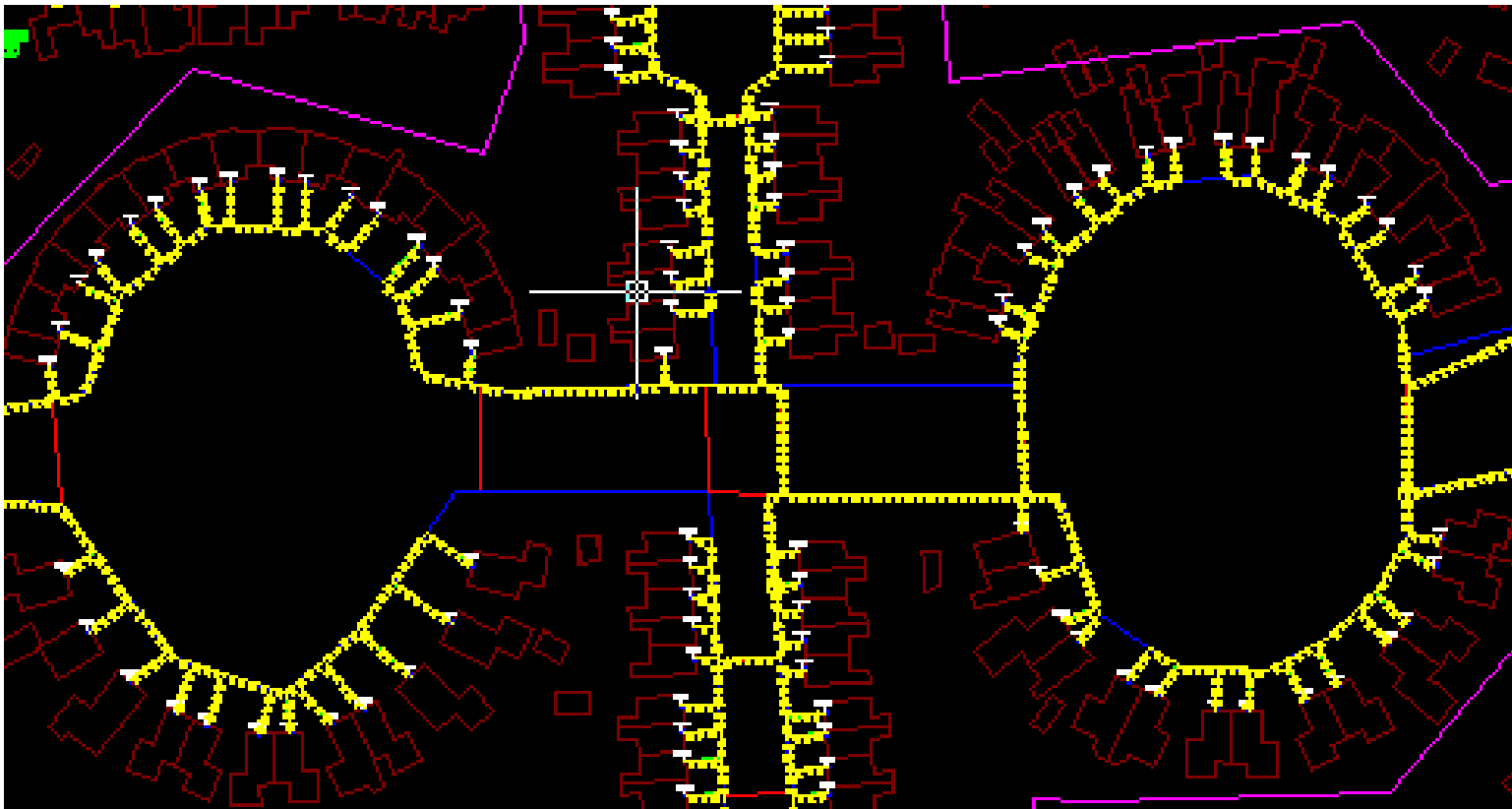|	
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NetID **Fibre schematics**	13: Import NetDesign data 14: Prepare feeders 15: Create Fibre-schematics 16: Update As-built data from NetDesign

(10) Automatic: Import NetOptimus cable routes and DP locations

(11) Automatic: Create DP's and drop-cable's. Create all labelling per DP.
Based on settings: P2P / GPON, cable types, amount of fibres per FTU etc.
(12) Automatic: export to NetID

FTTH / FTTX OSP network design / engineering process flow

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(13) Automatic: import NetDesign drawing

(14) Engineer: prepare feeders
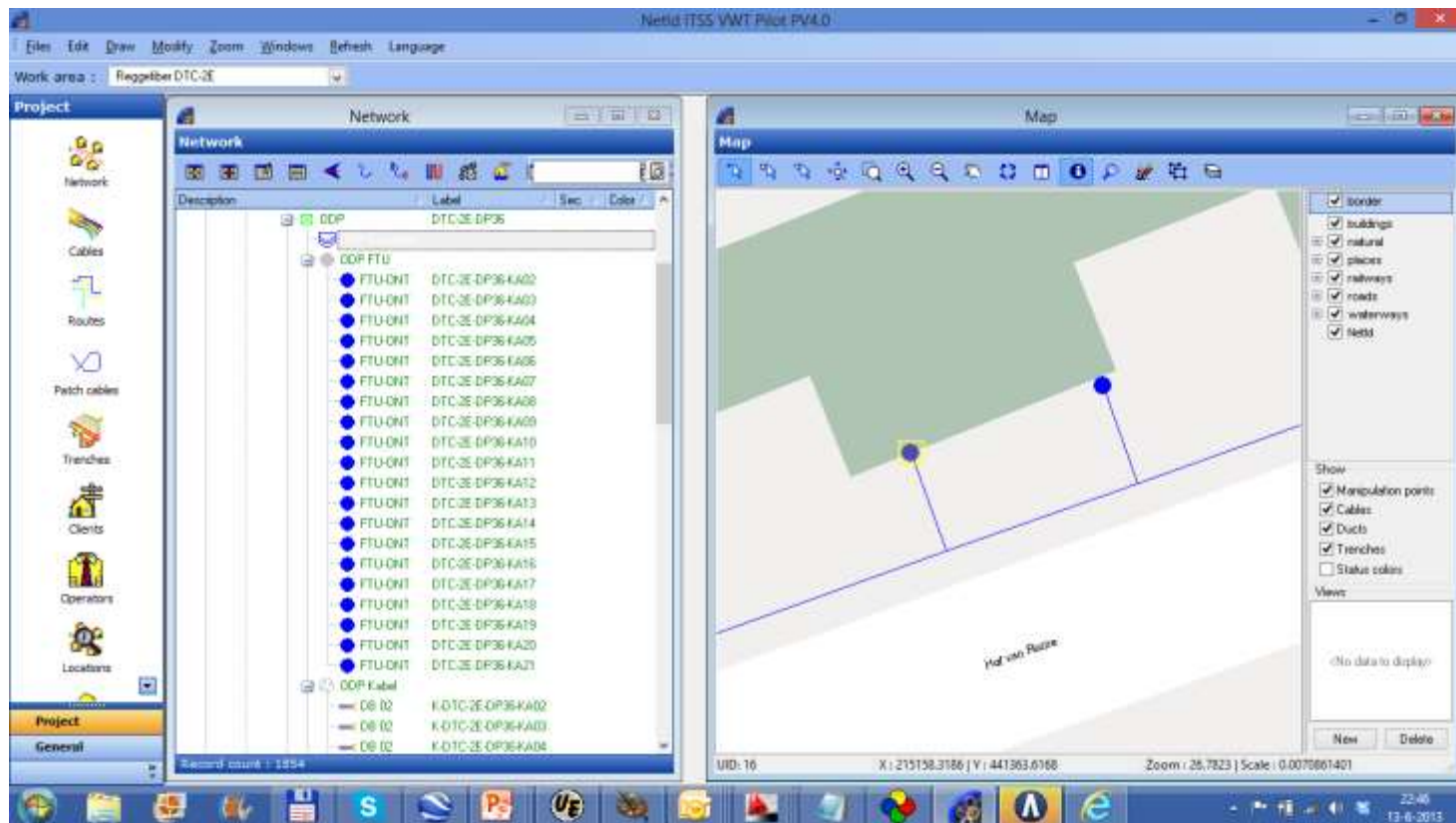
(15) Automatic: create fibre schematics

Any language, any tube & fibre colour schema

(16) Automatic: simple update to As-Built with NetDesign data

Connections

Connections for item : ODP Cassettes

Item	Sec.	No.	Color	Patch cat	Sec.	No.	Patch cable	Color	Sec	No.	Item	Sta	Se
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		1	Rood/Rood		1	1		Oranje/Blauw	1	ODP Kabel / DB 02, K-DTC-E2-DP02-KA01		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		2	Rood/Wit		1	2		Oranje/Groen	2	ODP Kabel / DB 02, K-DTC-E2-DP02-KA01		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		3	Rood/Geel		1	3		Oranje/Blauw	1	ODP Kabel / DB 02, K-DTC-E2-DP02-KA02		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		4	Rood/Blauw		1	4		Oranje/Groen	2	ODP Kabel / DB 02, K-DTC-E2-DP02-KA02		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		5	Rood/Groen		1	5		Oranje/Blauw	1	ODP Kabel / DB 02, K-DTC-E2-DP02-KA03		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		6	Rood/Violet		1	6		Oranje/Groen	2	ODP Kabel / DB 02, K-DTC-E2-DP02-KA03		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		7	Rood/Bruin		1	7		Oranje/Blauw	1	ODP Kabel / DB 02, K-DTC-E2-DP02-KA04		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		8	Rood/Zwart		1	8		Oranje/Groen	2	ODP Kabel / DB 02, K-DTC-E2-DP02-KA04		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		9	Rood/Oranje		1	9		Oranje/Blauw	1	ODP Kabel / DB 02, K-DTC-E2-DP02-KA05		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		10	Rood/Turquoise		1	10		Oranje/Groen	2	ODP Kabel / DB 02, K-DTC-E2-DP02-KA05		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		11	Rood/Roze		1	11		Oranje/Blauw	1	ODP Kabel / DB 02, K-DTC-E2-DP02-KA06		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		12	Rood/Grijs		1	12		Oranje/Groen	2	ODP Kabel / DB 02, K-DTC-E2-DP02-KA06		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		13	Wit/Rood		2	1		Oranje/Blauw	1	ODP Kabel / DB 02, K-DTC-E2-DP02-KA07		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		14	Wit/Wit		2	2		Oranje/Groen	2	ODP Kabel / DB 02, K-DTC-E2-DP02-KA07		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		15	Wit/Geel		2	3		Oranje/Blauw	1	ODP Kabel / DB 02, K-DTC-E2-DP02-KA08		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		16	Wit/Blauw		2	4		Oranje/Blauw	2	ODP Kabel / DB 02, K-DTC-E2-DP02-KA08		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		17	Wit/Groen		2	5		Oranje/Blauw	1	ODP Kabel / DB 02, K-DTC-E2-DP02-KA09		
Mini Buis, 1, C:Rood / DK 96 MD, DTC-E2-B12-K02		18	Wit/Violet		2	6		Oranje/Groen	2	ODP Kabel / DB 02, K-DTC-E2-DP02-KA09		

OK

SOFTWARE   FTTH / FTTX ITS-Software Suite™

FTTH / FTTX ITS–Software Suite ™

Is a proven software solution to Design, Build & Maintain FTTX networks.

The ITS–Software Suite™ has designed, registered and installed several millions of connections.

The ITS–Software Suite™ :

- Cost optimized automatic CAD design
- Dedicated software for FTTH / FTTX Project–Management
- Simple conversion from pre–registration to As–built network registration
- Offers full control over your projects

SOFTWARE

FTTH / FTTX ITS-Software Suite™: network design

NetDesign™
Flexible solution for FTTH / FTTX **design**, based on Autocad.
Automatic: costing, cabling, labelling, easy switch from P2P to GPON.
Fast output as: schematics, installer ready & as–built designs. Easy to learn.

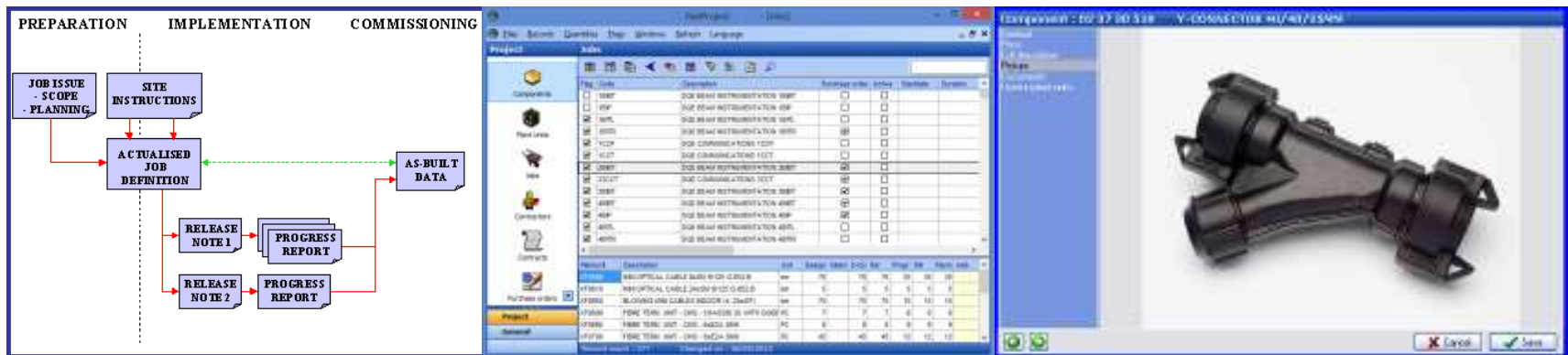# SOFTWARE

FTTX ITS-Software Suite™: project management

NetProject™

Extensive system for: Material, Contract and **Project management**.

Lego–like structure: three project levels with 'building blocks'.

Total process control, including: purchasing, contractors, progress reports.

Completely customizable and simple to operate.

SOFTWARE

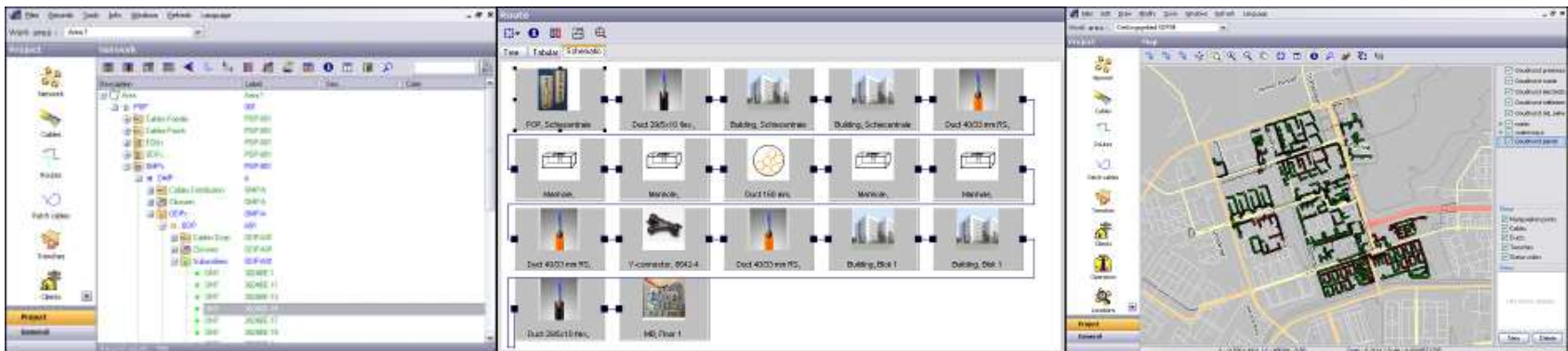FTTX ITS-Software Suite™: network registration

NetID™

Network **registration** with easy tree structure en integrated GIS.

All information directly available for multiple users.

All network details are direct available in multiple views and GIS.

Lego–like customizable building blocks. Easy to operate.

SOFTWARE NetOptimus™

NetOptimus™
Our automatic network design solution.

Creates the highest quality FTTH / FTTX network–designs by using complex optimization algorithms within a user friendly graphical interface.

Cost optimized network designs are made in minutes instead of days.

Optimization parameters:
• Civil costs
• Material costs
• Installation costs

SOFTWARE NetOptimus™
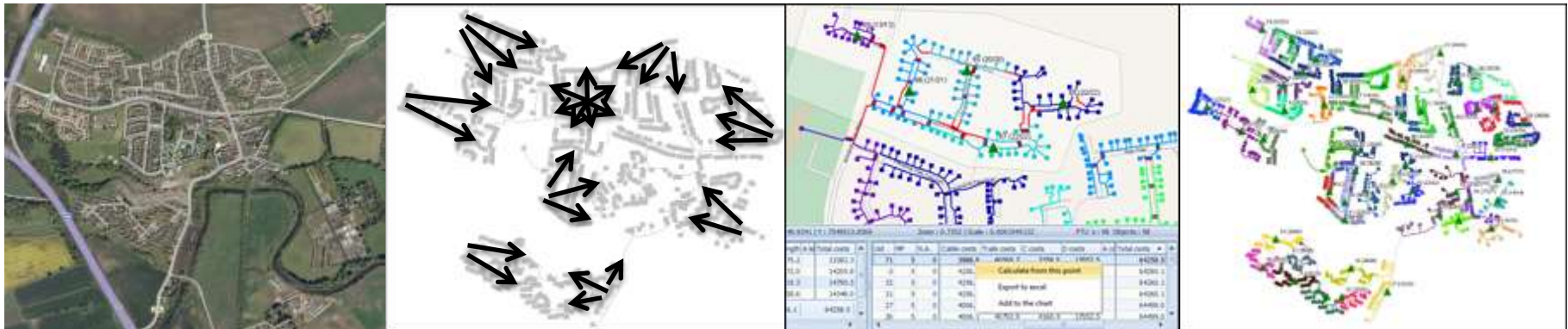
NetOptimus™ offers substantial benefits in terms of reducing the engineering time and network building costs.

The best network designs are listed and made visible within minutes

SOFTWARE   NetOptimus™

Network designs and costs are directly available per area.

Multiple levels and network concepts.

Savings (approx):
20 % less drop cable by improved grouping homes
2 % less distribution cable by best DP positioning
2% less trenching costs by improved routing

100 times faster than manual / alternative engineering

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