

## EES Electronic Enforcement Systems

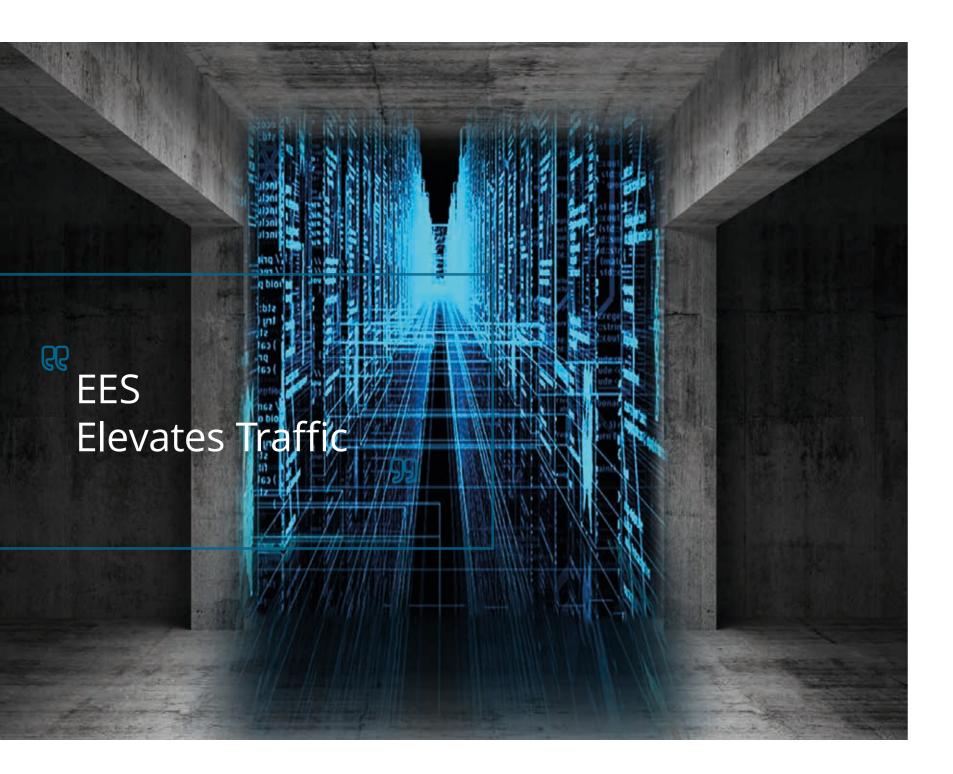


# Complete Mobility Provider.



# Who are we?

Founded in 2009, ISSD provides solutions to create added value in ISSD is located in METU Teknokent, Turkey's most prestigious technology the field of intelligent transport. Its areas of expertise include traffic development zone. The company stands out from its competitors with management, electronic applications and consulting services. With its product portfolio, technical expertise, R&D capabilities and long-term the slogan 'Complete Mobility Provider', ISSD contributes to mobility customer relationships. ISSD's young and talented team is committed from A to Z by working for a greener, more efficient and accessible to creating value and aims to become a global leader by delivering this transport future in more than 5000 locations in 15 countries. value to the world.



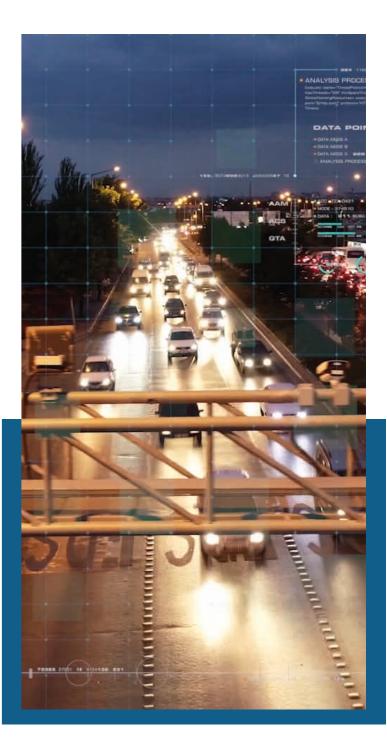
### EES Electronic Enforcement Systems

Traffic accidents, which increase as a result of rapidly growing vehicle ownership in our country, necessitate the use of electronic systems in traffic control.

We developed the following enforcement systems by using Automated Number Plate Recognition:

- Red Light Enforcement Systems
- Speed Corridor Enforcement Systems
- Parking Enforcement Systems
- Safety Lane Enforcement Systems
- Mobile Enforcement Systems
- Overheight Detection Systems

Our systems are integrated into the POLNET system used by the General Directorate of Security and are available 24/7 under all weather conditions with 96% accuracy level.



#### Automated Number Plate Recognition System POINTR Moonlight, POINTR P3000

Automated Number Plate Recognition System allows the vehicle license plates to be read, stored and analyzed.

Automated Number Plate Recognition System

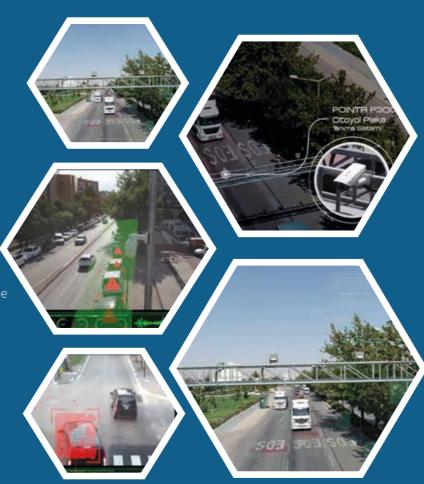
- Integrated License Plate Recognition System
- High Resolution Camera
- Continuing to work by keeping records in memory in network connection failures
- Night vision with IR Led
- IP 66, IK10 and NEMA 4x certified enclosure
- Ability to work 24/7
- Brand, type and color recognition
  Sending data to a central server via FTP
- Average speed violation detection with central software

#### Easy Operation, Easy Installation and Easy Integration

Highway Number Plate Recognition Systems in compact structures can be mounted on roads, bridges, highways and art structures.

Automated Number Plate Recognition System Applications

- Red Light Enforcement Systems
- Speed Corridor Enforcement Systems
- Parking Enforcement Systems
- Mobile Enforcement Systems
- Safety Lane Enforcement Systems
- Overheight Detection Systems



#### Technical Specifications POINTR Moonlight, POINTR P3000

NS	Туре	Integrated License Plate Recognition System. All In One Unit (Camera, IR Source, OCR Proccessor Unit)							
atio	Resolution	3 MP, 2048 x 1536 CMOS Color Camera							
Specifications	Lens	Varifocal Lens (8mm ~ 50 mm)							
	Lighting	64 / 6 Pieces High Power Infrared Led, 850 nm (Moonlight / P3000)							
System	Storage	128 GB SSD (Upgradeable to 512 GB)							
Sys	Video Format			2048x1546 30 FPS (	H.264, H.265, MJPEG, MPEG4)				
	Network	10/100 Base-T Ethernet (Ops. PoE)	_	Cooling/Heating	Included				
Network	Protocol	TCP/IP, UDP, HTTP, FTP, SMTP, NTP, DHCP, RTP	Environmental	Operating Humidity Rang	ge %0 ~ %90				
		Restrictable 1 ~ 100 Instant Transfer		Operating Temperature	-40 ~ +85				
	Instant Transfer	to Defined FTP Server	En <i< td=""><td>Sunroof</td><td>Included</td></i<>	Sunroof	Included				
	Time Sync	NTP Server		Enclosure	IP66 / IK10 / NEMA 4X				
	Relay Output	Included		-					
S	Horizontal Recognition	4,2 Metre							
atior	Photo Tagging	Included (Plate, System Name, Date, etc.)							
ecifica	License Plate Recognition	Plates with Non-Reflective Floor (Rectangular, Square)	ates	CE	Included LVD				
ANPR Specifications	Vehicle Recognition	96% Capture 96% Plate 80% Type 70% Brand 70% Color Accuracy Rate	Certificates	Certification	EN 61000 EN 60950 EN 55016 EN 60068				
Power	Operating Voltage	24 VAC	Outdoor	E Dimensions	164 x 132 x 404 mm (GxYxU)				
	Power Consumption	30 ~ 50 W	Õ	Weight	4.5 Kg				

#### Red Light Enforcement System POINTR K3000

Red Light Enforcement System POINTR K3000, detects vehicles committing red light violations. The system contributes to increased traffic safety by minimising accidents caused by violations at signalised intersections.

Red Light Enforcement Recognition Systems

- Integrated License Plate Recognition System
- High Resolution Camera
- Continuing to work by keeping records in memory in network connection failures
- Night vision with IR Led
- IP 66, IK10 and NEMA 4x certified enclosure
- Ability to work 24/7
- Sending data to a central server via FTP
- Wide Angle Vision Camera
- High Power Flash Unit
- Virtual loop

#### POINTR K3000 Capabilities

- Line–based red light violation detection
- Number plate recognition
- 24/7 operation
- Remote access
- Automatic standby in case of traffic signal malfunctions
- Ability to switch off the system from the centre when the traffic police manage the intersection
- High resolution video recording
- Automatic fine receipt arrangement

#### Red Light Enforcement System Day / Night

The images obtained from the Red Light Enforcement System and the processed data (location, license plate, vehicle brand, vehicle color, date and time of the enforcement) are automatically transmitted to PLATÜRK Software and fine receipts are automatically generated and presented to the operator's approval.





#### Technical Specifications Red Light Enforcement System

		Туре	
	ПS	Resolution	
	catio	Lens	
	ecifia	Lighting	
	n Sp	Storage	
	System Specifications	Video Format	
	0	Enforcement Camera Feature	
l		Network	
	Network	Protocol	TCP
		Instant Transfer	
		Time Sync	
		Relay Output	
	ANPR	Horizontal Recognition	
		Photo Tagging	Ind
		License Plate Recognition	
	0)	Vehicle Recognition	
	ver	Operating Voltage	
	Power	Power Consumption	

ce, OCR Proccessor Unit)	In One Unit (Camera, IR S	tem. All	Integrated License Plate Recognition Sys
536 CMOS Color Camera	3 MP, 2048		
ocal Lens (8mm ~ 50 mm)	Va		
620 nm			
(Upgradeable to 512 GB)	128 GB S		
4, H.265, MJPEG, MPEG4)	MP 3000x4000 30 FPS (H	12	
4, H.265, MJPEG, MPEG4)	MP 3000x4000 30 FPS (H	12	
Included	Cooling/Heating		10/100 Base-T Ethernet (Ops. PoE)
%0 ~ %90	Operating Humidity Range	Environmental	P/IP, UDP, HTTP, FTP, SMTP, NTP, DHCP, RTP
-40 ~ +85	Operating Temperature		Restrictable 1 ~ 100 Instant Transfer
Included	Sunroof		to Defined FTP Server
IP66 / IK10 / NEMA 4X	Enclosure	_	NTP Server
			Included
Included	CE		4,2 Metre
LVD EN 61000		Certificates	cluded (Plate, System Name, Date, etc.)
EN 60950 EN 55016		Certifi	Plates with Non-Reflective Floor (Rectangular, Square)
EN 60068 TS 13789	Certification		96% Accuracy Rate
	Dimonsions	t	
x 132 x 404 mm (GxYxU)		Outdoor Unit	24 VAC
4.5 Kg	Weight	0	30 ~ 50 W

#### Speed Corridor Enforcement System POINTR Moonlight, POINTR P3000

Speed Corridor Enforcement System calculates the average speeds of the vehicles between two specified points on the highways and detects the vehicles that violate the rules.

#### System Details

- Integrated License Plate Recognition System
- High Resolution Camera
- · Continuing to work by keeping records in memory in network connection failures
- Night vision with IR Led
- IP 66, IK10 and NEMA 4x certified enclosure
- Ability to work 24/7
- Brand, type and color recognition
- Sending data to a central server via FTP
- Average speed violation detection with central software

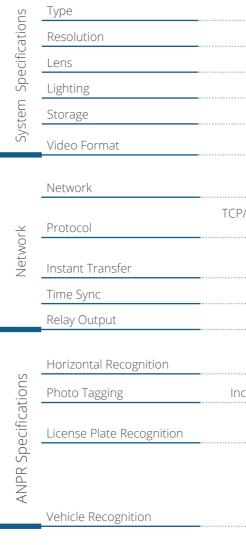


The Speed Corridor Enforcement System is comprised of number plate recognition units positioned at the entry and exit points of a designated corridor, along with central software that computes average speeds based on the collected number plate data. By measuring the travel time of vehicles from entry to exit and factoring in distance information, the system determines average speeds. Equipped with high-resolution cameras, it can detect vehicles on single or multi-lane roads, transmitting relevant details such as location, time, date, distance, direction, vehicle speed, and speed limit violations to a centralized software.

Unlike radar-based systems, this setup does not require calibration, and its emphasis on average speed enforcement aims to encourage compliance with speed limits across the entire route, contributing significantly to accident prevention resulting from excessive speed. The system also features safeguards such as audible warnings in the event of malfunctions or unauthorized interference.

#### Speed Corridor Enforcement System Features

- Remote control
- 24/7 speed enforcement
- High resolution photography of the offending vehicle and license plate identification
- Video recording with external camera



Technical Specifications

Wer	Operating Voltage
Pov	Power Consumption

#### Speed Corridor Enforcement System

Integrated License Plate Recognition Sy	stem. All	In One Unit (Camera, I	R Source, OCR Proccessor Unit)		
3 MP, 2048 x 1536 CMOS Color Camera					
Varifocal Lens (8mm ~ 50 mm)					
64 /	6 Pieces	High Power Infrared L	ed, 850 nm (Moonlight / P3000)		
		128 G	B SSD (Upgradeable to 512 GB)		
		2048x1546 30 FPS	5 (H.264, H.265, MJPEG, MPEG4)		
10/100 Base-T Ethernet (Ops. PoE)	(	Cooling/Heating	Included		
P/IP, UDP, HTTP, FTP, SMTP, NTP, DHCP, RTP	Environmental	Operating Humidity Ra	inge %0 ~ %90		
Restrictable 1 ~ 100 Instant Transfer		Operating Temperatur	-40 ~ +85		
to Defined FTP Server		Sunroof	Included		
NTP Server		Enclosure	IP66 / IK10 / NEMA 4X		
4,2 Metre cluded (Plate, System Name, Date, etc.) Plates with Non-Reflective Floor		CE	Included		
(Rectangular, Square)	tes		LVD		
96% Capture 96% Plate 80% Type 70% Brand 70% Color Accuracy Rate	Certificates	Certification	EN 61000 EN 60950 EN 55016 EN 60068 TS 13788		
24 VAC	Outdoor Unit	Dimensions	164 x 132 x 404 mm (GxYxU)		
30 ~ 50 W	0	Weight	4.5 Kg		

#### Parking Enforcement System POINTR P2000

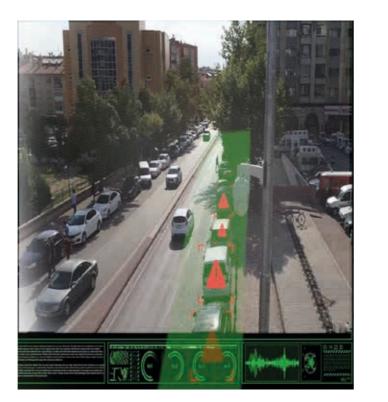
The POINTR P2000 system is designed to mitigate parking violations by employing a high-resolution camera with Pan-Tilt-Zoom capabilities and an integrated image processing card. Operating within a 75-meter radius, the system continuously scans areas where parking is restricted, automatically identifying vehicles that exceed the predetermined parking duration limits set by the operator.

Upon detection of a violation, the system records the offending vehicle, determines the duration of the violation, and issues an automatic fine receipt when the violation surpasses the operator-defined threshold time. Additionally, the system's built-in IP camera captures pictures and video recordings of the vehicle during the violation, transmitting this evidence to the central system.

The Parking Enforcement System's processed data, including location, number plate, vehicle brand, color, and date/time of violation, is then forwarded to the PLATÜRK Software, where fine receipts are automatically generated for operator approval. This integrated approach aims to streamline the enforcement process and enhance parking compliance.

### Parking Enforcement System Features

- Violation detection within a 75 metre radius
- Automated number plate recognition
- Remote access
- 32 Preset points violation detection
- High resolution video recording
- Automatic fine receipt issuance
- Quick setup

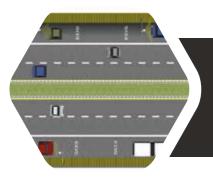


#### Technical Specifications Parking Enforcement System

NS	Туре	
atio	Resolution	
ecific	Lens	
Spe	Lighting	
System Specifications	Storage	
Sys	Video Format	
	Network	
Jrk	Protocol	TCP
Network	Instant Transfer	_
	Time Sync	
	Relay Output	
	Horizontal Recognition	
ions	Photo Tagging	In
ANPR Specifications	License Plate Recognition	
ANPR S		
	Vehicle Recognition	
Wer	Operating Voltage	
PC	Power Consumption	

Integrated License Plate Recognition System. All In One Unit (Camera, IR Source, OCR Proccessor Unit)				
2 MP, 1920 x 1080 CMOS Color Kamera				
Varifocal Lens (8mm ~ 50 mm)				
64	/ 6 Ade	t High Power Infrared Leo	d, 850 nm (Moonlight / P3000)	
		128 GB	SSD (Upgradeable to 512 GB)	
		1920x1080 30 FPS (	H.264, H.265, MJPEG, MPEG4)	
10/100 Base-T Ethernet (Ops. PoE)		Cooling/Heating	Included	
P/IP, UDP, HTTP, FTP, SMTP, NTP, DHCP, RTP		Operating Humidity Ran	ge %0 ~ %90	
Restrictable 1 ~ 100 Instant Transfer to Defined FTP Server	Environmental	Operating Temperature	-40 ~ +85	
NTP Server	Ц Ш	Sunroof	Included	
Included		Enclosure	IP66 / IK10 / NEMA 4X	
4,2 Metre				
cluded (Plate, System Name, Date, etc.)				
Plates with Non-Reflective Floor (Rectangular, Square)	es	CE	Included	
96% Capture 96% Plate 80% Type 70% Brand	Certificates	Certification	LVD EN 61000 EN 60950 EN 55016 EN 60068	
70% Color Accuracy Rate				
24 VAC	Outdoor	Dimensions	164 x 132 x 404 mm (GxYxU)	
30 ~ 50 W	nO	Weight	4.5 Kg	

### Safety Lane Enforcement System POINTR E3000



The Safety Lane Enforcement System is a system that allows the license plates of vehicles traveling in the safety lane to be read, stored and the data obtained to be analyzed. Safety Lane Enforcement System consists of image-based license plate recognition unit and central server applications. The license plate recognition unit contains a high resolution camera and embedded processor platform in an IP66 enclosure with built-in IR illumination unit.

The Safety Lane Enforcement System can detect the license plate, brand and color of vehicles 24/7 in all weather conditions. Thanks to the system, these data can be transferred to a desired remote center either wired or wirelessly.

## Easy to Use, Easy Installation and Easy Integration It can be mounted on poles, bridges, highway structures.



#### Technical Specifications Safety Lane Enforcement Systems

S	Туре	
atio	Resolution	
cific	Lens	
System Specifications	Lighting	
tem	Storage	
Sys	Video Format	
	Network	
×	Protocol	TCP/
Network	Instant Transfer	
	Time Sync	
	Relay Output	
	Horizontal Recognition	
lions	Photo Tagging	Inc
ecisifications	License Plate Recognition	
(1)		

tio	Photo Tagging	lı
Specisificatio	License Plate Recognition	
ANPR Spe		
AN	Vehicle Recognition	

le l	Operating Voltage
×01	Power Consumption

Integrated License Plate Recognition System. All In One Unit (Camera, IR Source, OCR Proccessor Unit)				
3 MP, 2048 x 1536 CMOS Color Camera				
Varifocal Lens (8mm ~ 50 mm)				
64 /	6 Piece	es High Power Infrared Le	ed, 850 nm (Moonlight / P3000)	
		128 GE	3 SSD (Upgradeable to 512 GB)	
		2048x1546 30 FPS	(H.264, H.265, MJPEG, MPEG4)	
10/100 Base-T Ethernet (Ops. PoE)		Cooling/Heating	Included	
/IP, UDP, HTTP, FTP, SMTP, NTP, DHCP, RTP	iental	Operating Humidity Range	%0 ~ %90	
Restrictable 1 ~ 100 Instant Transfer to Defined FTP Server	Environmenta	Operating Tempera- ture	-40 ~ +85	
NTP Server	Ú L	Sunroof	Included	
Included		Enclosure	IP66 / IK10 / NEMA 4X	
4,2 Metre cluded (Plate, System Name, Date, etc.) Plates with Non-Reflective Floor (Rectangular, Square) 96% Capture 96% Plate 80% Type	Certificates	CE	Included LVD EN 61000 EN 60950 EN 55016	
70% Brand 70% Color Accuracy Rate	_	Certification	EN 60068	
24 VAC	Outdoor	Weight	164 x 132 x 404 mm (GxYxU)	
30 ~ 50 W	$\bigcirc$	Weight	4.5 Kg	

### Mobile Enforcement System POINTR-2M

POINTR-2M is used to detect situations such as parking, safety lane violations, stops that adversely affect the normal flow of traffic, to prevent possible accidents and to ensure road safety by controlling corridors and intersections through moving cameras.

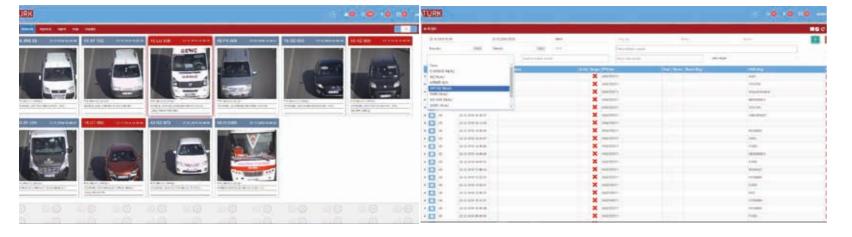
#### POINTR-2M Features

- Full compliance with the General Directorate of Security's number plate recognition and EES filing, database table and column standards
- Automatic Information provision with the use of the POLNET vehicle query service





- HTML/HTML5 web interface
- Detailed archive query and reporting
- User management features
- Automatic fine receipt issuing and addition to the General Directorate of Safety's system
  Storage of fine receipts in PDF format
- Violation Detection Scheduling for EES violation detections



### Technical Specifications Mobile Enforcement System

SL	Туре	
System Specifications	Resolution	
scific	Lens	
Spe	Lighting	
tem	Storage	
Sys	Video Format	
	Network	
¥	Protocol	TCP/II
Network	Instant Transfer	
	Time Sync	
	Relay Output	

	cations	Horizontal Recognition				
		Photo Tagging	Inc			
	ANPR Specifications	License Plate Recognition				
	ANPR	Vehicle Recognition				
	Power	Operating Voltage				
	Po					
	_	Power Consumption				

Integrated License Plate Recognition Sy	vstem. A	ll In	i One Unit (Camera, IR	Source, OCR Proccessor Unit)			
			3 MP, 204	48 x 1536 CMOS Color Camera			
Varifocal Lens (8mm ~ 50 mm)							
850							
			128 GE	SSD (Upgradeable to 512 GB)			
			2048x1546 30 FPS	(H.264, H.265, MJPEG, MPEG4)			
10/100 Base-T Ethernet (Ops. PoE)	_	Cooling/Heating		Included			
/IP, UDP, HTTP, FTP, SMTP, NTP, DHCP,	Environmental	Op	perating Humidity Ran	<u>ge</u> %0 ~ %90			
Restrictable 1 ~ 100 Instant Transfer	nno <sup>-</sup>	Op	perating Temperature	-40 ~ +85			
to Defined FTP Server	Envir	Su	inroof	Included			
NTP Server		En	nclosure	IP66 / IK10 / NEMA 4X			
Included		-					
4 2 Motro							
4,2 Metre		S	CE	Included			
cluded (Plate, System Name, Date, etc.) Plates with Non-Reflective Floor (Rectangular, Square)	Certificates			LVD EN 61000 EN 60950			
96% Capture 96% Plate 70% Color Accuracy Rate			Certification	EN 55016 EN 60068			
24 VAC	Outdoor	UNIT	Dimensions	164 x 132 x 404 mm (GxYxU)			
20 50.14			Weight	4.5 Kg			
30 ~ 50 W							

This document includes essential information about completed projects of ISSD BİLİŞİM ELEKTRONİK EĞİTİM SAN. Ve. TİC. A.Ş. All document materials, including, but not limited to, logos, design, text, graphics, other files and the selection and arrangement are Copyright © ISSD BİLİŞİM ELEKTRONİK EĞİTİM SAN. ve TİC. A.Ş. and can only be used with the permission of the company. The content of this document cannot be copied, edited, rented, lent, delivered, printed or published without written permission from the company. None of the contents in this document can be sold or distributed for profit or be published in other institutions or companies' documents. ISSD BİLİŞİM ELEKTRONİK EĞİTİM SAN. ve TİC. A.Ş. reserves the right to change any and all content contained in this document at any time without notice.

Any and all of our customers/users/company/institution/firm agrees to the terms and conditions in this "Legal Notice" by acquiring or possessing this document under any and every condition. This notice applies exclusively to the access and use of this document and does not alter the in any way the terms and conditions of any other agreement that customers/users/company/institution/firm has with ISSD BİLİŞİM ELEKTRONİK EĞİTİM SAN. ve TİC. A.Ş.

ISSD A.Ş. Complete Mobility Provider

Address: Üniversiteler Mahallesi İhsan Doğramacı Bulvarı Halıcı Binası No:33 ODTÜ Teknokent Çankaya Ankara Türkiye

Contact Phone +90 312 210 00 15 Fax +90 312 210 10 75 E-mail info@issd.com.tr

www.issd.com.tr