RALLY CONTROL SYSTEM

Event Management
and
Control Solutions

GEOTRAQ®

ABOUT THE SYSTEM

- Total rally control based on the latest technologies in Vehicle Tracking, Communication and Data processing.

- Safety as highest priority of the rally management and effective dispatch of rescue services.

- Easy operation with automatic actions based on custom scenarios and procedures.

- Interactive Data base solution for global management - administration, tracking, timing, result processing, rescue services and publicity of rally events.

- Developed by active Drivers and Officials.
  "From racing seat to code-base in five minutes".
  Fastest response for custom solutions on the market.

SYSTEM MODULES

EVENT MANAGEMENT

Interactive online portal for handling entries, competitors' data, finances and communication. Pre-administrative check by validation of uploaded documents. Full competitors' dossier with performance statistics and history of achievements.

RALLY CONTROL CENTER

Online platform for real time monitoring, intervention and control while running the event. Latest technology of satellite tracking, connections and data analysis. Proven procedures for handling critical incidents and management of rescue forces.

TIMING AND RESULTS PROCESSING

High precision timeekeeing with FIA certified devices, connected to the system. State of the art technology for validation and control of results by syncronizing timing and GPS data. "Artificial inteligence" algorythm for prevention and detection of human error.

BENEFITS

EASY ADMINISTRATION AND DATA STORAGE

Having created it's personal account in the system, the competitor manages easy and fast all administrative procedures online from the entry to the payment. The organizer has full executive view on registered data and can automatically process it for further event purposes. Web based access 24/7.

HIGHEST SAFETY AND FASTEST RESPONSE

With the rally virtually "taking place live" on monitors in the control room, fast and accurate decisions can be taken based on real time data. Execution of orders and deployment of forces is done promped and proper. Chronological record of any incident or breach of regulations is kept throughout the event.

PRECISE, CLEAR AND RAPID RESULTS

The technology for processing data from TAG-Heuer timing equipment and GPS tracking devices garantiees accurate time records and automated validation of control points. Processing of results, application of penalties, preparation of classifications are done by click of a button.

GOOD FOR:

ORGANIZERS

From club events to international competitions - the system implements the latest FIA requirements on satellite tracking, timing and safety.

MOTORSPORT DISCIPLINES

The system meets the FIA requirements for sports & regularity rallies, cross-country rallies & bajas and any kind of motorsport events not run on circuits.

VEHICLES

No matter if used on motorbikes, quads, side-by-side vehicles, cars or trucks, the hardware is easily fitted and power supplied.

STRUCTURE

INPUT:

Personal data

Live tracking data

Timing data

PROCESSING:

Evaluation of data

Custom scenarios and procedures

Artificial intelligence algorithms

OUTPUT:

Live Tracking & Results

Rally control center

Public web view

COMPETITOR DATABASE

SATELLITE TRACKERS

TAG-HEUER TIMING DEVICES

CLOUD SERVERS

PROCESSING

RALLY CONTROL MANAGEMENT

RESULTS TIMEKEEPING

PUBLIC TOOLS ONLINE APPS
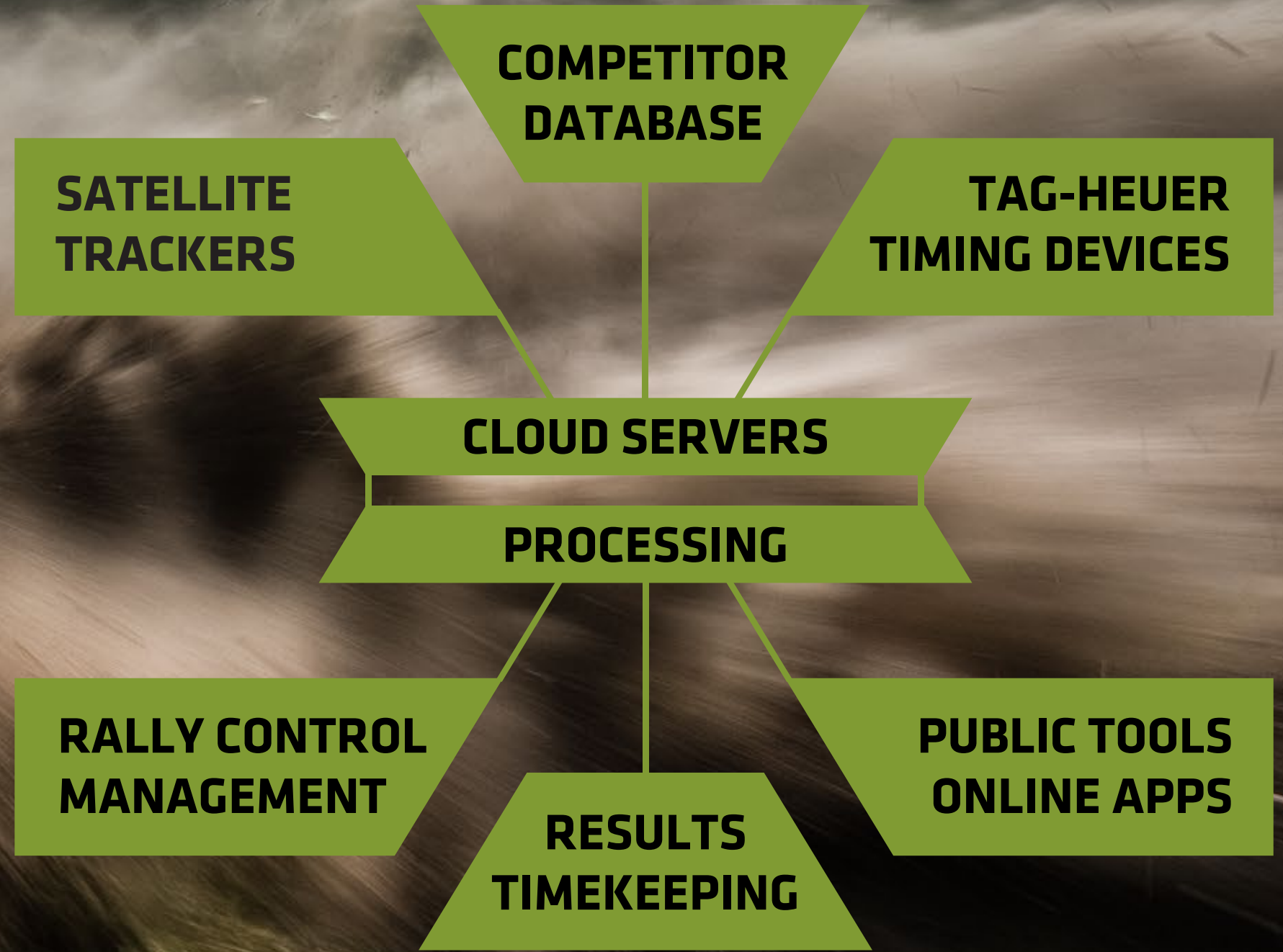
SATELLITE TRACKER

FEATURES

- GPS & GLONASS satellite systems
- High class GPRS communication
- High sensitivity internal antennas
- Li-Po rechargable battery
- Build in precise accelerometer
- IP67 rating

BENEFITS

- High accuracy in positioning
- Easy fitting by cable ties
- Low power consumption
- Standard power connectors
- DC 6-30V power supply
- High capacity memory storage

COM-BOX

RALLY SAFETY SYSTEM

OVERTAKE

SOS · OTR · OK

FEATURES

- SOS alarm
- Hazard beacon
- Overtake request
- "Red flag" notification
- RFiD transmission

BENEFITS

- Vehicle-to-Vehicle communication
- Vehicle to Rally Control communication
- Flashlight signal
- Buzzer connection
- "Good stop" confirmation

"NEXT LEVEL"

- Latest in Rally Control Technology
- 7" high contrast display
- Iridium satellite & 4G communication
- GPS + GLONASS positioning
- Radio & Wifi "Mesh Network"
- External high sensitivity antenas
- Smart OTR with position verification
- Voice and Video communication
- FIA Cross Country Rally Navigation
- Safety and Hazzard beacons
- Digital Road book & Time card
- Integrated RFiD identification
- High capacity internal battery
- IP 65 rating
- Easy fitting and wiring

Model under development

TAG-HEUER TIMING

FEATURES

- TAG-Heuer precision
- FIA certified timing equipment
- Time record print-out
- Long lasting battery
- Multiple timing options
- RFiD reading

BENEFITS

- Direct communication with server
- Backup SMS transmision
- Flying-finish to Stop control communication
- World standard in sports timing

CHRONO-TABLET
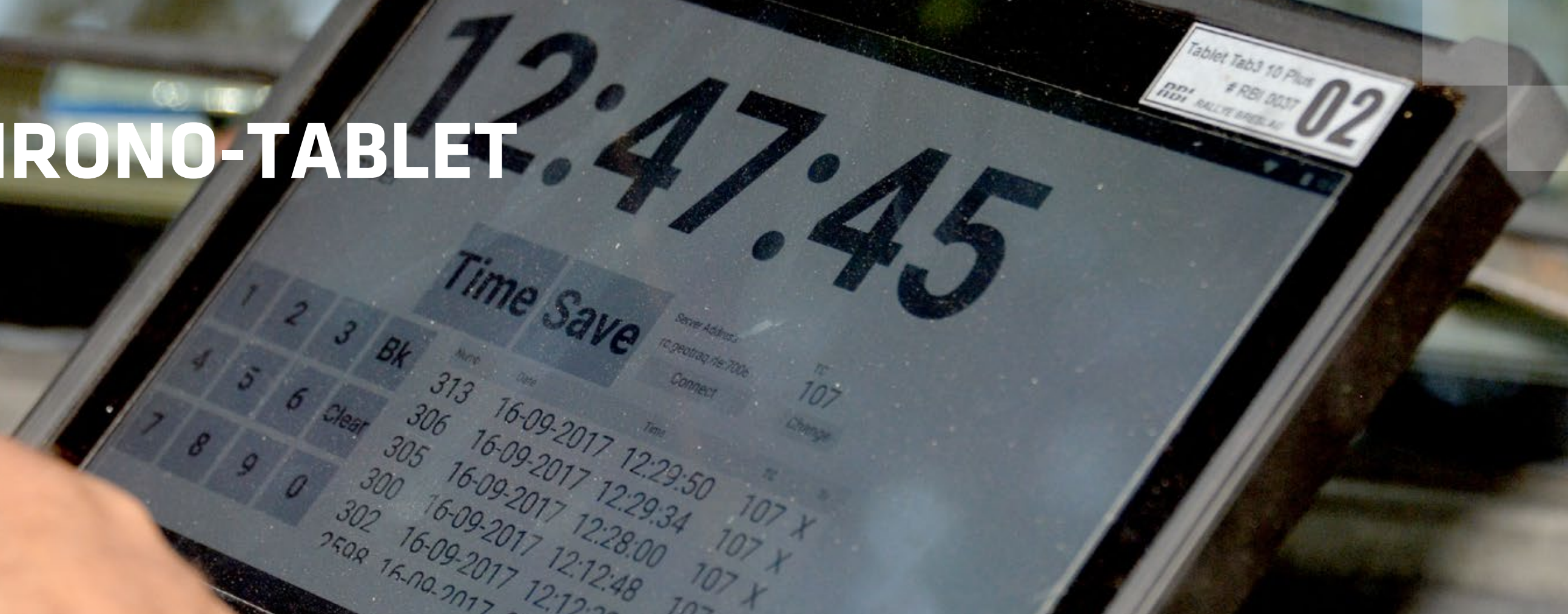
FEATURES

- Android based timing software
- LTE data transmission
- GPS synchronization
- Multiple control point IDs
- Access to Timing Control Module

BENEFITS

- Easy solution for Time & Passage controls
- Reliable software
- Ease of operation
- Direct communication with Chief Timekeeper via App

RALLY CONTROL

- The Rally Control module offers full view and command while running the event. The Officials can monitor, evaluate and execute precise actions to keep the safety of drivers, marshals and spectators.

- Streaming of data and processing in real time trigger automated alarms and notifications for any incident or occurrence in the rally stages. The system "keeps an eye" on everyone and everything.

- Reports created from the telemetric data help investigation of accidents and analyzing of risks. It is a great contribution to further development of motorsport safety standards.

OVERVIEW

FEATURES

- View complete rally route
- Access live telemetrics of each vehicle
- Create semi-automated Log book
- Check positioning of rescue and recovery forces on the route

316

308

314

312

310

309

Poligon Wojskowy

NR	CREW	CLASS	SS 4: 08:23-17:59, MAX: 05:15	
			START	FINISH
214	TZAHI KAFRI / SHAY REGEV	SSV.2	08:44:01	11:44:19
202	GAL SHACHAM / NIMROD OFIR	T1	08:43:02	11:49:40
212	AMIR ABU MUCH / OMRI ABUMUCH	SSV.2	08:41:01	11:50:10
201	RAZ HAYMANN / HILLEL SEGAL	T1	08:42:02	11:52:12
211	GABRIEL ABERGEL / CHARLY GOTLIB	SSV.2	08:47:02	11:52:41
22	ERAN WOLLENBERG	B.2	09:03:00	12:07:16
209	ALI DOGANER / POLAT EMSEN	SSV.2	08:51:02	12:08:01
15	NIV AHARONI	B.1	09:04:01	12:21:59
16	GADI NACHMANI	B.1	09:09:02	12:22:14
204	MATTIA DI SABATINO / DAVIDE DE ANGELIS	T2	08:48:02	12:37:46
9	BARAK DUDAI	B.2	09:13:00	12:41:18
17	YACOV DADIA	B.2	09:12:01	12:41:18
218	EVANGELOS BERSIS / PANAGIOTIS KALFAS	TH.1	08:50:03	12:41:38
10	GAL TSACHOR	B.2	09:07:02	13:00:47
3	DAN KATANOV	B.5	09:11:01	13:13:12
206	ALI CETIN / SABAHATTIN MUSTAFA DEMIR	SSV.2	08:53:03	13:13:20
217	IOANNHS VORRIAS / ATHANASIOS MPAKAS	TH.3	08:49:03	13:13:26
205	DAVID SHPRONTZ / SHAHAR SHPRONTZ	T2	08:52:02	13:13:55
11	ERAN LEVY	B.2	09:10:02	13:14:24
12	AMIT SADOT	B.2	09:06:02	13:14:56
2	SHMULIK FAUST	B.5	09:14:02	13:16:12
6	ROTEM COSTA	B.3	09:08:02	13:16:24
8	NIR BAKAI	B.2	09:05:01	13:16:24
5	NAFTALI DAHAN	B.3	09:15:02	13:26:58
208	ALI SAIM TEKIN / ABDULLAH ARMAN OZDEMIR	SSV.2	08:55:02	13:35:06
215	SHARON BEN AMI / JONATHAN BEN AMI	SSV.2	08:45:01	17:05:00
207	DANNY PEARL / OMER PEARL	SSV.1	08:56:02	17:16:00
4	ACHINOAM HAREL	B.5	09:16:03	17:36:00
28	YAEL MOSER	B.1	09:18:00	17:38:00
51	SAGI BURSTIN	ATV	09:19:02	17:39:00
25	SHLOMO COHEN	B.1	09:00:00	—
210	ELIRAN YIFRAH / ADAR MELAMED	SSV.2	09:00:00	
216	SHLOMO EINY /	SSV.2	09:00:00	—

Rally progress report screen

ALARMS

MEDICAL HELP [X]
Starter: 6 (0 km/h)
Map:
-0.8697°, 36.4237°

Time: 09:46:21 (13 V)
0711784895 / 0716607813
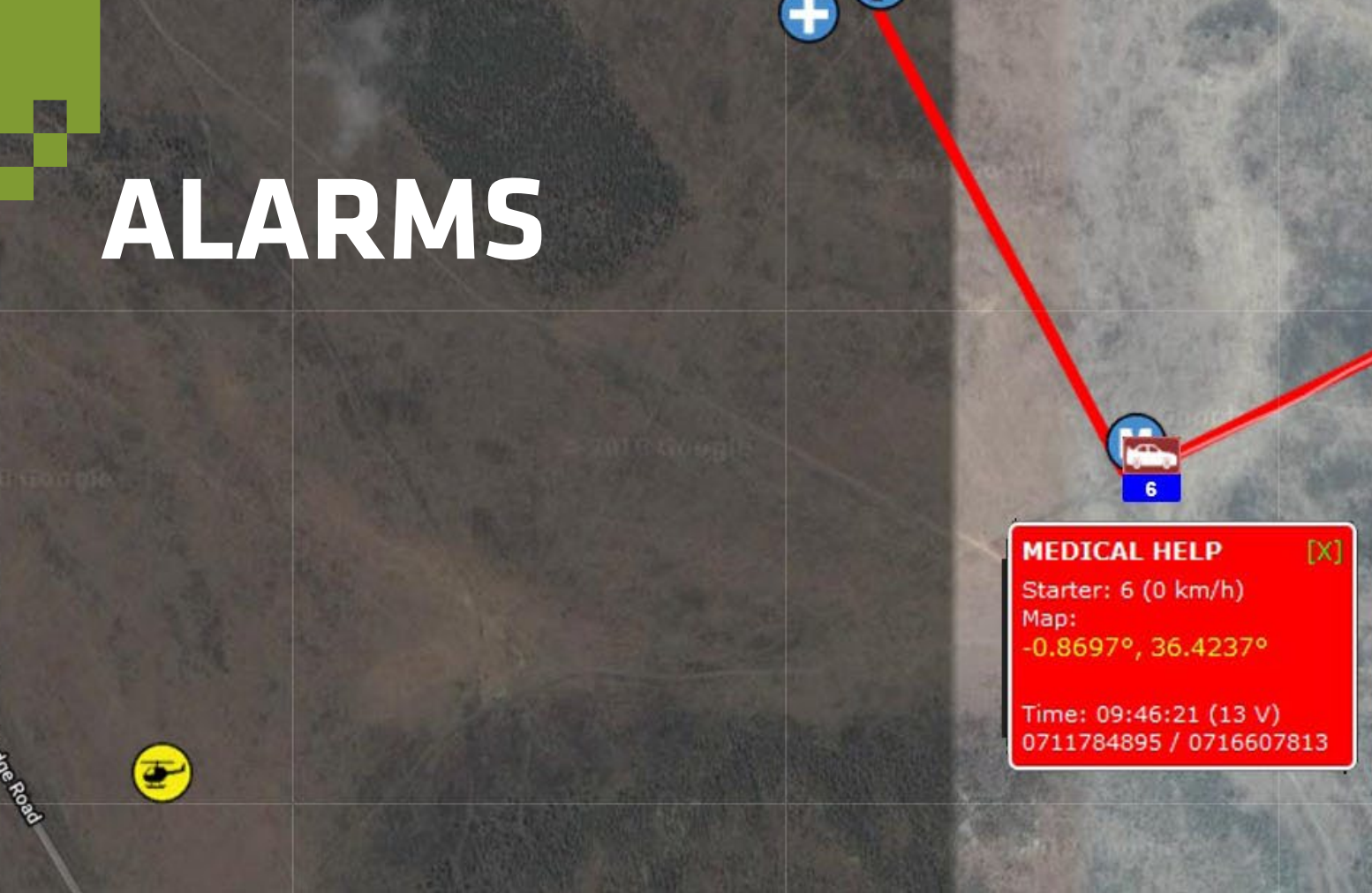
EXPAND CLASSES ☑
EXPAND SAFEZONES ☑
EXPAND MAP LEGEND ☑
- 123 MOVING
- 123 STOPPED
- 123 STANDING > 10 SEC
- 123 ACTIVE SOS REQUEST
- 123 NO UPLINK > 5 MIN

Update view

⚙ SAFETY PROCEDURE

1. SOS alarm on screen
2. Check location
3. Read G-force data
4. Contact crew
5. Dispatch rescue
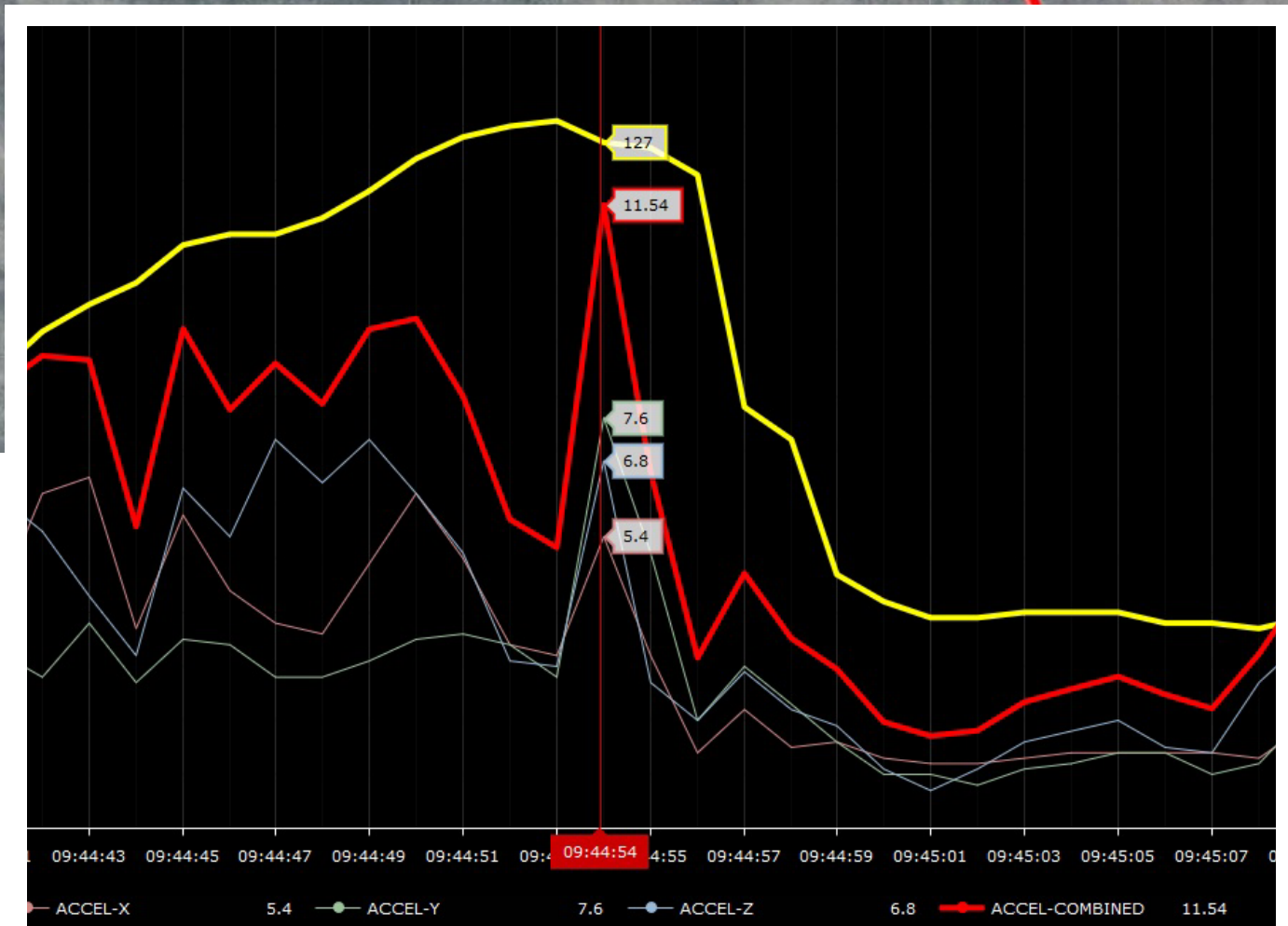
Abnormal G-force detection with rapid increase of 3D Vector and fast deceleration - flat landing - possible heavy accident

TIMEKEEPING

- The data streamed from all TAG-Heuer timing devices, Chrono-tablets and GPS track logs is analysed and displayed on an user friendly interface.

- Each record is traced and verified by Geotraq's artificial intelligence algorithms and any deviation is reported for check and validation by an Official.

- The system permanently controls the passage of the route, the reaching of points and the compliance with speed limits.

- In particular cases the special rally-replay-feature is activated to play back the record and investigate the situation.

TIMEKEEPING SCREEN

FEATURES

- Reports all on a complex interface
- Gives direct access to competitor's record
- Notification for infringements
- Detailed reports for speeding

Competitor's record with data checks and result validation

ROUTE VALIDATION

Waypoint validation screen

⚙ **FEATURES**

- Automated check for route completeness.
- Notification for deviations
- Waypoint validation
- Automated speed control checks
- Rally replay and comparison among competitors
- Neutralization zones and times

LIVE APPs

"Follow the event live from everywhere on PC, tablet and phone."

- Live timing and results help competitors and spectators to see the performance and stay connected to the action.

- Live tracking shows the route, location of the crews and their progress.

- Rally replay gives everyone the chance to play back the event and compare performance.

"Share rally emotion with all spectators via the online tools developed by Geotraq."

Car/Team	Time/Speed	Diff/Diff
KTM	02:45:43.27	
KTM-YOHANANOF-CAMP FACTORY	78.7km/h	
HORNET ISRAEL	02:55:10.79	09:27.52
	74.4km/h	09:27.52
CanAm X3	03:00:18.66	14:35.39
KAFRI DRIVE	72.3km/h	05:07.87
KTM	03:04:15.51	18:32.24
KTM-YOHANANOF-CAMP FACTORY	70.8km/h	03:56.85
CanAm X3	03:05:40.89	19:57.62
	70.2km/h	01:25.38
Mitsubishi L200	03:06:39.73	20:56.46
RALLIART ITALIA	69.8km/h	00:58.84
KTM	03:07:24.21	21:40.94
KTM-YOHANANOF-CAMP FACTORY	69.6km/h	00:44.48
CanAm X3	03:09:10.04	23:26.77
	68.9km/h	01:45.83

Pos/N	Drivers	Class	Car/Team	Time/Pen	Total	Diff/Diff
1	TAL WAINBERG	GPS.TT		09:31:27.52	09:46:27.52	
230	NITZAN BUSTAN		HORNET ISRAEL	00:15:00		
2	ZIV KARMI	GPS.B	KTM	09:32:06.88	10:48:06.88	01:01:39.36
19			KTM-YOHANANOF-CAMP FACTORY	01:16:00		01:01:39.36
3	RAZ HAYMANN	T1.2	Segal Layogev	11:00:58.89	11:00:58.89	01:14:31.37
201	HILLEL SEGAL					00:12:52.01
4	ERAN WOLLENBERG	B.2	KTM	11:05:56.80	11:05:56.80	01:19:29.28
22			KTM-YOHANANOF-CAMP FACTORY			00:04:57.91
5	DAN MAYA	GPS.B	KTM	10:17:15.14	11:13:15.14	01:26:47.62
20			KTM-YOHANANOF-CAMP FACTORY	00:56:00		00:07:18.34
6	AMIR ABU MUCH	SSV.2	CanAm X3	11:22:20.28	11:22:20.28	01:35:52.76
212	OMRI ABU MUCH					00:09:05.14
7	GUY BITTON	GPS.SSV	CanAm X3	10:51:13.40	11:31:13.40	01:44:45.88
229	ELI OHAYON			00:40:00		00:08:53.12
8	LIOR SHWARTZ	GPS.B	KTM	11:46:25.00	11:46:25.00	01:59:57.48
18			PREMIUM CITY MARKET			00:15:11.60

LIVE TIMING & RALLY REPLAY

`00:10:50`

FEATURES

- Rally replay plays back the event
- Ghost starts simulator
- Time slider to faster find the point of interest
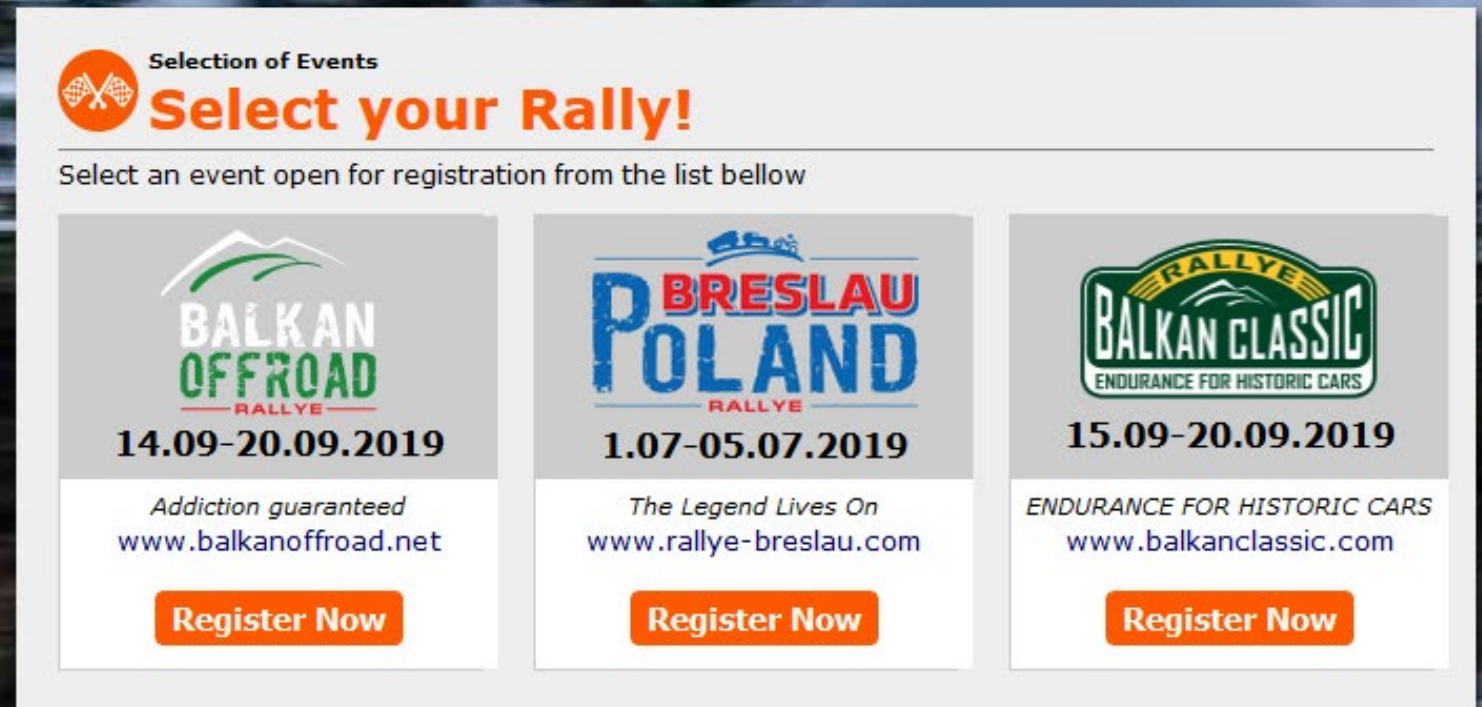- Filter to select category, group or a single crew

Start List

Pos	N	Driver	Cl	Car	Time
1	230	TAL WAINBERG(ISR) / NITZAN BUSTAN(ISR)	GPS.TT		08:00
2	227	DOR HASON(ISR) / GUY GOTTLIBE(ISR)	GPS.TT	Buggy	08:01
3	228	EYAL LAVEE(ISR) / YUVAL SHARON(ISR)	GPS.TT	Buggy	08:02
4	229	GUY BITTON(ISR) / ELI OHAYON(ISR)	GPS.SSV	CanAm X3	08:04
5	232	NAOR ASHKENAZI(ISR)	GPS.SSV	CanAm	08:05
6	231	ITSHAK MINI(ISR) / ROY ZAMIR(ISR)	GPS.C		08:06
7	223	OVAD ARAZI(ISR) / IDAN ABUDI(ISR)	GPS.C	Chevrolet Silverado	08:07
8	222	DANIEL GOLAN(ISR) / ORLY GOLAN(ISR)	GPS.C	Buggy	08:08
9	225	ILAN PATORI(ISR) / OR ELIRAZ(ISR)	GPS.C	Svi Cohen Yael	08:09
10	219	MICHAEL HEN(ISR) / SHAHAR SHVILI MOSHE(ISR)	GPS.C	Toyota Hilux	08:10
11	220	YARIV KELER BARUCH(ISR) / TOMER GELFAND(ISR)	GPS.C	Jeep	08:11
12	226	EREZ ABRAMOV(ISR)	GPS.C		08:12
13	201	RAZ HAYMANN(ISR) / HILLEL SEGAL(ISR)	T1.2	Segal Layogev	08:22
14	209	ALI DOGANER(TUR) / POLAT EMSEN(TUR)	SSV.2		08:23
15	211	GABRIEL ABERGEL(ISR) / CHARLY GOTLIB(BEL)	SSV.2	CanAm X3	08:24
16	215	SHARON BEN AMI(ISR) / JONATHAN BEN AM(ISR)	SSV.2	CanAm X3	08:25
17	212	AMIR ABU MUCH(ISR) / OMRI ABU MUCH(ISR)	SSV.2	CanAm X3	08:26
18	202	GAL SHACHAM(ISR) / NIMROD OFIR(ISR)	T1.1	Mitsubishi L200	08:27
19	204	MATTIA DI SABATINO(ITA) / DAVIDE DE ANGELIS(ITA)	T2.2	Mitsubishi Pajero	08:28
20	224	SAGI NOI(ISR) / BEN GILADI(ISR)	SSV.2	WildCat	08:29
21	217	IOANNHS VORRIAS(GRC) / ATHANASIOS MPAKAS(GRC)	TH.3	Mitsubishi Pajero	08:30
22	205	DAVID SHPRONTZ(ISR) / SHAHAR SHPRONTZ(ISR)	T2.1	Mitsubishi	08:31

Start lists, Stage and Overall Results

EVENT MANAGEMENT

- Registration and submitting of entry form has never been so easy.

- The competitor's account contain information for drivers, vehicles and service personnel.

- All documents for the administrative check can be uploaded and verified prior the event.

- Intuitive inteface gives fast workflow and ease of operation.

- The data in the competitor's account can be used for registration in multiple events by a single click.

EVENT DATABASE

FEATURES

- All data on one place for easy access and administration
- Direct data syncronisation to the Timekeeping module
- Direct SMS / Email communication to all or selected entrants
- Online library of uploaded documents
- Payment status and invoicing

Entry form - fast and easy registration

RALLY
CONTROL
SYSTEM

Event Management and Control Solutions

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GE⊘TRAQ®