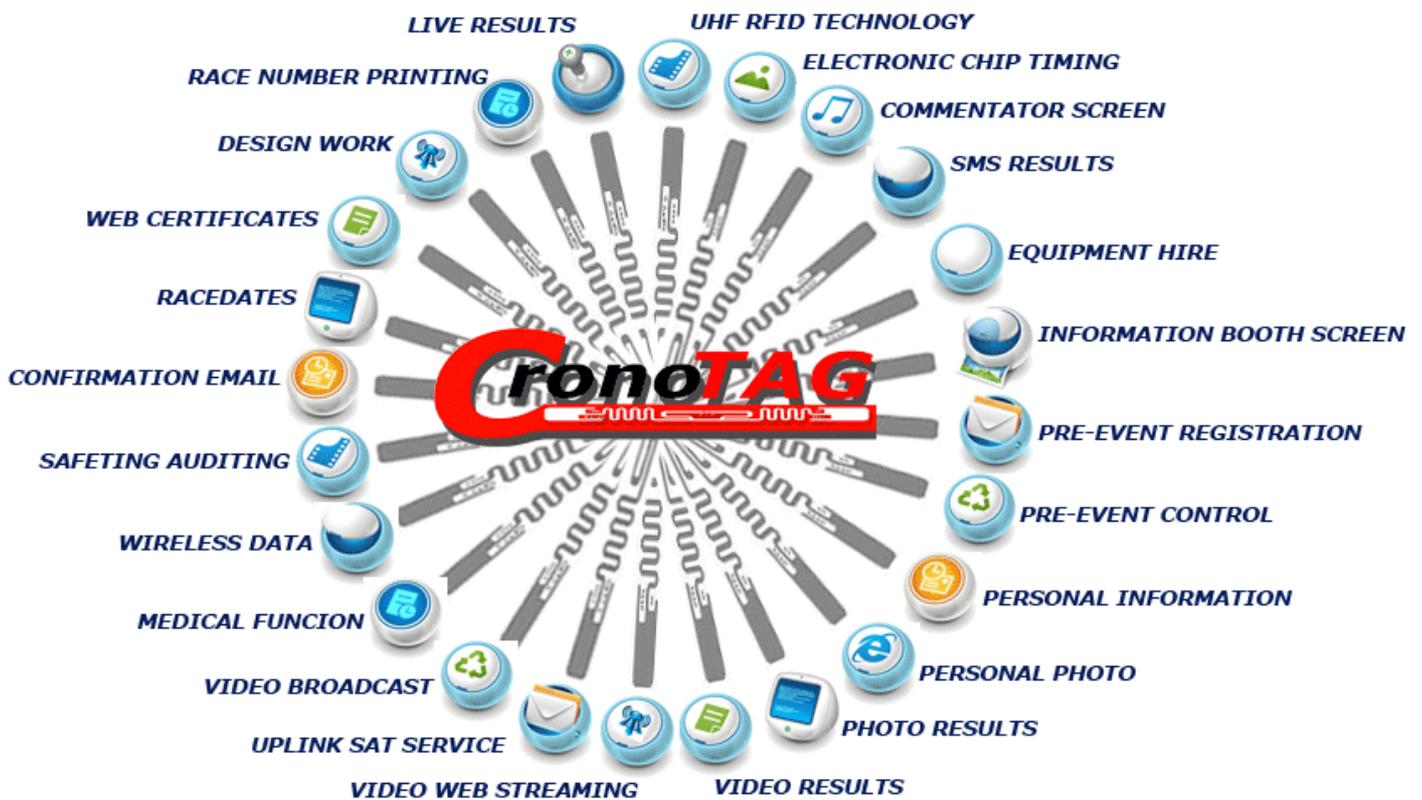


CronoTAG

TIMING SYSTEM

MULTISPORT WITH AUTOMATIC DETECTION

MEANS CHIP/TAG RFID UHF



www.occhiuzzitag.it

1. Introduction

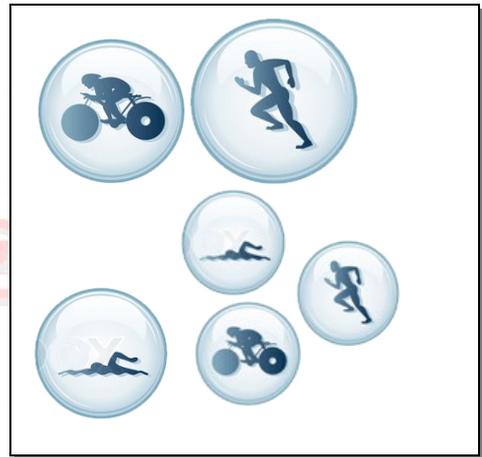
CronoTAG is a detection system of the time race with the help of RFID (Radio Frequency Identification) and comes from the experience of thirty years with FICr (Italian Timekeepers Federation) and the experience of working in IT since 1976.

CronoTAG is compatible and integrated with other systems, have long been developed, such as the Multigraphic (for managing graphics Television broadcast) and CronoMultiGraphic (for the computerized management of sporting events Multi Sport).

CronoTAG collects various subsystems that are used to manage the entire business process of the sporting event: the online management of the creation of the race, collecting inscriptions and their validation, the management of the online publication of the charts, photographs and television, issuance of certificates of participation to the airing of the video and television graphics.

Automatic detection for many specialties:

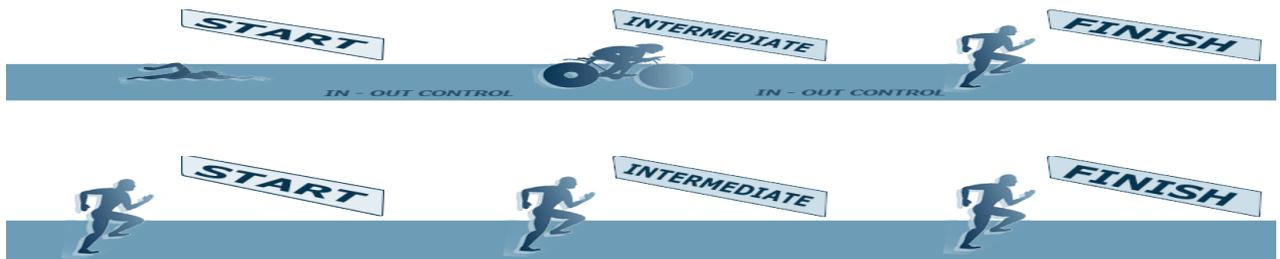
- ✓ **Running – Adventures – Cross-Country - Hide**
- ✓ **Mountain Bike**
- ✓ **Cycling Road**
- ✓ **Cyclocross**
- ✓ **Cycling Track**
- ✓ **Triathlon**
- ✓ **Duathlon**
- ✓ **Acquathlon**
- ✓ **Horse Riding**
- ✓ **Endurance Riding**
- ✓ **Skiroll**
- ✓ **Rowing**
- ✓ **Swimming**
- ✓ **Enduro/Motorally**
- ✓ **Rally**
- ✓ **Regolarità Auto-Moto**
- ✓ **Trial**
- ✓ **Cinofilia**
- ✓ **Ecc.**



For circuit races, road, off road or water surfaces.

For detection:

- ✓ **departure (also in several places and with staggered starts)**
- ✓ **intermediates**
- ✓ **tachometer and chronological passage**
- ✓ **Arrival (also multi-point)**



2. Technology

In telecommunications and electronics (RFID or Radio Frequency Identification, or Radio Frequency Identification) is a technology for identification and / or automatic data storage of objects, animals or people (AIDC Automatic Identifying and Data Capture) based on the capacity of data storage by special electronic devices (called tags or transponders) and on the ability of these to respond to "question" at a distance by special devices fixed or portable, for simplicity called "readers" (actually also are "writers") to radiofrequency communicating (or updating) the information contained in them. In a sense, can then be assimilated to systems "reading and / or writing" Wireless with numerous applications.

What is automatic identification?

The term "automatic identification" (auto ID) will identify the technologies used to automatically identify objects / people / animals. Some technologies that enable the automatic identification are: barcodes, voice recognition or biometric and RFID (Radio Frequency Identification).

What is RFID?

RFID (Radio Frequency Identification) is the technology that uses radio waves to automatically detect the data. With the radio frequency identification any object / animal / person to be identified, and requires no contact any of the visual type I of the electric type. Developed for military applications, there is the '70s and is well tested, finding new uses and new applications.

How does an RFID system?

To operate an RFID system must contain the tag (or transponder consists of a microchip and an antenna), the reader (reader / writer) and antenna / antennas (integrated or not in the player). The Reader is the electronic device that can read and / or write data to the RFID tag. The antennas, when not integrated in the reader, may have different shapes and sizes depending on the performance of letura required by the system identification.

How is made a transponder?

A transponder is composed of a microchip and an antenna of a few microns thick. There is a transponder for every application! You can have transponders: circular or rectangular; Rigid or flexible; coated glass, paper or plastic, small or medium size; water resistant or temperature.

What is the difference between active and passive tags?

Passive tags derive their name from the fact that the data transmission / reception takes place in the absence aid of the power batteries. It follows that are referred to as active tags those devices powered by a battery. Passive tags respond to queries made by the player by electromagnetic induction electric current transmitted from the antenna of the device requesting. Passive tags derive their name from the fact that the data transmission / reception takes place in the absence aid of the power batteries. It follows that are referred to as active tags those devices powered by a battery. Passive tags respond to queries made by the player by electromagnetic induction electric current transmitted from the antenna of the device requesting. Passive tags derive their name from the fact that the data transmission / reception takes place in the absence aid of the power batteries. It follows that are referred to as active tags those devices powered by a battery. Passive tags respond to queries made by the player by electromagnetic induction electric current transmitted from the antenna of the device requesting.

What is the difference between HF and UHF tags?

The two markings indicating the frequency of use of the tag: "High Frequency" (such as 13.56MHz) and "Ultra High Frequency" (such as 868). In addition to the operating frequency UHF tags, pills, differ from HF those for the reading distances far superori that can reach. in certain applications are also used tags that operate in the microwave range (GHz) and low frequency (LF).

What are they and how the anti-collision systems?

The anti-collision algorithms are used to manage communications reading multiple tags simultaneously. They adjusting the phenomenon of overlapping of the radio waves emitted simultaneously.

What is the EPC (Electronic Product Code)?

The acronym stands for Electronic Product Code EPC and represents the evolution of technology UPC (Universal Product Code). E 'then a single number and that uniquely identifies a specific object / product along the chain of production and distribution. The code is contained within the memory of a transpnder and is used as an addresser dynamic information associated with the product (picture). Dynamic data, such as the date of acceptance or shipment of any package, but are not stored in the transponder in a single database, to which access is made possible instantly from anywhere in the world through the EPC.

3. Why UHF and HF or LF

The two technologies are predominant on the market RFID HF stands for High Frequency - 13.56MHz and UHF stands for Ultra High Frequency - 866 / 917MHz, depending on countries.

HF

HF RFID technology are used generally for proximity applications or when the distance and the population of the tag is not excessive. so:

- ✓ Vicinity cards (burglar alarms, subscriptions..)
- ✓ Electronic passport
- ✓ Access control gates or readers Wall
- ✓ Time & Attendance

UHF

UHF systems are generally used when the operating distances and / or the number of tags to be collected is high. The release of the UHF frequencies with 2W of power can reach distances in free air, of more than 3 meters. so:

- ✓ Validation pallet / freight
- ✓ Electronic inventory of stock
- ✓ Monitoring Human Resources

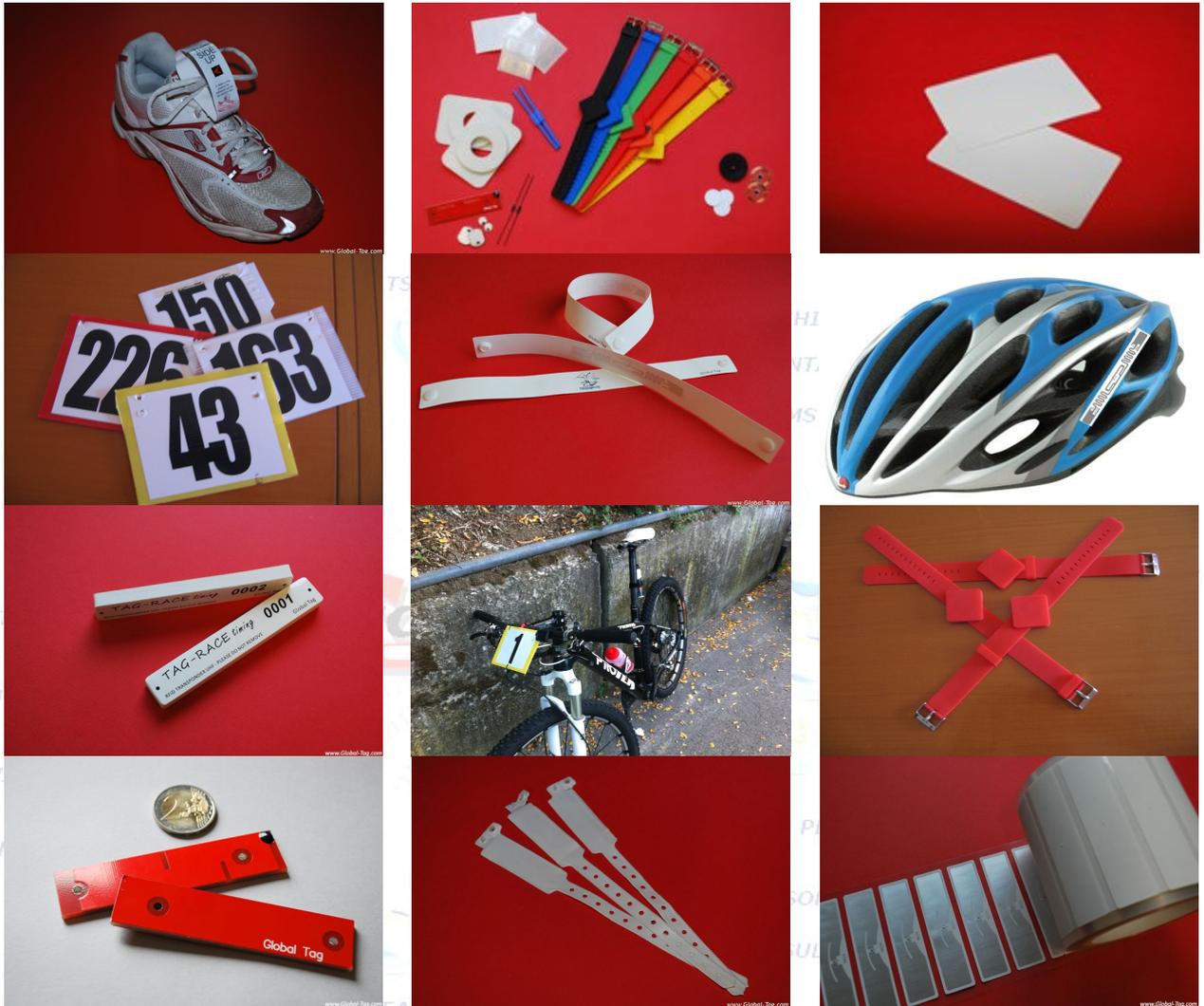
Confronto di tecnologie RFID passivi

	Bassa frequenza (LF)	Ad alta frequenza (HF)	Ultra High Frequency (UHF)
Gamma di frequenza:	125kHz, 134,2 kHz	13,56 MHz (Global)	865-928 MHz (Regionale dipendente)
Distanza di lettura:	Fino a 8cm per Texas Instruments 32 millimetri di vetro, fino a 7 cm per EM4102 disco 50mm (transponder dipendente)	Tra cinque centimetri e 8 centimetri (transponder dipendente)	Tra 1,5 e 2,0 m (transponder dipendente) e fino a 16 m.
ISO Standard:	ISO 11784, ISO 11785, ISO 18000-2	ISO 15693, ISO 14443	ISO 18000-6C
Velocità di trasmissione:	Velocità di trasmissione lenta	Dati più alto tasso di leggere i tag LF	Velocità di trasmissione dati veloce
Capacità di lettura multipla:	Di solito si legge il singolo tag	Buono	Capacità elevata di leggere più tag contemporaneamente
Tag supportati:	Una vasta gamma di transponder a quelle specifiche, tra cui NXP (Philips) HITAG, EM Microelectronic e Texas Instruments	Una vasta gamma di transponder a 13,56 MHz, tra cui ISO 15693, ICODE (I e II) e la famiglia completa di Mifare ISO14443 (A & B)	EPC Class 1 Gen 2 Transponder
Fornitori di TAG:	NXP, Sokymat, EM Microelectronics, Texas Instruments	ACG, HID, Toshiba, iDTRONIC, Invengo, Tagsys, UPM Raflatac, X-ident e molti altri	Alien, Avery Dennison, AVONWOOD Eureka, Caen, Confidex, iDTRONIC, Intermec, Invengo, Omni-ID, Toshiba, TI, UPM Raflatac, X-ident e molti altri
Costo Tag:	Relativamente costoso	Varia a seconda del tipo di tag	Costo molto basso dovuto al processo produttivo più semplice.
Reader Costo:	Bassa (tecnologia più affermati)	Bassa (tecnologia più affermati)	Superiore (la tecnologia più complessa)
Dimensione Reader Antenna:	Corto raggio di lettura LF. Richiedono una piccola antenna	Lettori HF mobili a corto raggio richiedono solo una piccola antenna	Antenne relativamente grandi
Capacità di memoria Tag:	Memoria più piccole dimensioni rispetto a HF tag RFID passivi	Capacità relativamente elevata di memoria, tipicamente 256 bit a 8 Kbyte	Memoria più piccole dimensioni rispetto al passivo tag RFID HF, tipicamente 96 bit a 1 Kbit
Prestazioni in prossimità di liquidi e metalli:	Prestazioni influenzato da acqua circostante o metalli	Comprovata esperienza di prestazioni affidabili e accurate dei tag HF di liquidi e metalli	Se non adeguatamente progettati, i tag UHF possono essere condizionati dalla vicinanza ai metalli, liquidi e tessuti umani. Tuttavia esistono tag UHF in metallo che in alcuni casi superano i loro omologhi HF
Sicurezza:	Funzionalità di crittografia Basso	Molteplici funzioni di crittografia / sicurezza	Leggi protezione / scrittura e anti-clonazione, funzioni di crittografia bassi

4. Which to choose?

The TAG UHF can be applied to various substrates depending on the type of sport to handle and by the athlete or structure which in fact bring the TAG.

Here are some examples:



5. L'Hardware

CronoTAG uses UHF readers.

Readers have the following characteristics:

- ✓ Long Range third generation multi protocol for the identification of transponders UHF EPC Class 1 e 2 ISO 18000-6 su frequenze 860-960 Mhz;
- ✓ Protocolli Host e Scan Mode, Buffered Read Mode, Notification Mode e Tag filtering;
- ✓ Linux Operating System (64Mb RAM – 256 Mb Flash);
- ✓ Low Noise Transmitter Architecture;
- ✓ High receiver sensitivity for detection range TAG enlarged and homogeneous;
- ✓ Reading RSSI data for localization of the TAG identified and signal quality;
- ✓ High speed reading on collision algorithm;
- ✓ DRM (Dense Reader Mode);
- ✓ Power over Ethernet (POE) o esterna a 24V;
- ✓ Potenza RF Max 4 Watt;
- ✓ Multiplexer integrato;
- ✓ Monitor Canale RF;
- ✓ Reading TAG up to 16 meters;
- ✓ Interfaccia Ethernet, RS232, RS484, USB, USB_Host per WLAN dongle;
- ✓ Connecting to 4 antennas omni or unidirectional;
- ✓ Possible link, via MUX Multiplexer, up to 8 antennas on each input (4x8).



Reader Master



Reader for intermediate

The Antennas

It was decided to use antennas to "gate" (suspended on the finish line) so as not to obstruct the passage, even at high speed, athletes and media.

This can only be achieved with readers and UHF antennas that allow the reading at distances greater than 60 cm of classical carpets used by other technologies.

With similar equipment you can cover openings of 2 to 12 meters with 4 antennas.



You can still use other types of antenna depending on the sport or situation.

6. Software

CronoTAG is divided into two subsystems: the system interface to the readers of the Hardware that allows the administration and control of its true bearing of the TAG and the timing system itself, which manages the race by race and maintenance of files of personal subscribers (also online with the site), the management of the tachometer, the management of the final documents (lists, charts, etc.) also published online.

CronoTAG Interface

id	connessione	indirizzo_ip	porta_ip	com_nr	descrizione	notifica_ip	notifica_port
1	2	192.168.10.10	10001	1	LRU Notifica	192.168.10.4	10005
2	2	192.168.10.11	10001	1	FlyBoard	192.168.10.113	10002

Management readers and initialization race.

ID	TAG ID	T. RILEVATO	T. SOLARE	PUNTO RIL.	N. GIRO	ANT.	RSSI
9	00000000000000000000000000023	00:00:12.406	12:23:50.945	LRU Notifica	0	0	-0
8	00000000000000000000000000012	00:00:09.156	12:23:47.695	LRU Notifica	0	0	-0
7	00000000000000000000000000001	00:00:05.969	12:23:44.508	LRU Notifica	0	0	-0

Detection and control TAG / Race

CronoTAG Race

The screenshot shows the 'MTB_PARTENZA_ARRIVO : Maschera' window. At the top, it displays the date '16/11/2013', time '12:00:36.500', and 'MTB Atleti SCELTA PERCORSO E STATO'. The main area is divided into several sections:

- ISCRITTI (Registered):** A list of participants with columns for number (N°), name, gender, and age. Participants 1-10 are highlighted in green.
- PARTITI (Starts):** A table showing the start order and times for participants 1-10.
- ARRIVO MTB (Arrival):** A table showing arrival times and names for participants 1-10.
- ULTIMI TRANSITTI (Last Transits):** A table showing the last transit times and names for participants 1-10.
- ATTESI (Waiting):** A section for managing waiting participants, currently showing 'ATTESI GI'.
- Control Panel:** A green box at the bottom left displays '010' (participant number), '16:11:24' (time), and '00:00:00' (timer), with buttons for 'S', 'F', 'R', and 'SET'.

Example race management Start / Finish

The screenshot shows the 'MTB_MULTIGIRO : Maschera' window. It features a similar layout to the single race interface but with additional features for multi-lap and multi-point races:

- GIRO (Lap) Management:** A vertical list of buttons on the right side, labeled 'GIRO 01' through 'GIRO 15', each with an 'ATTESI GIRO' button next to it.
- Control Panel:** A green box at the bottom left displays '010' (participant number), '16:18:19' (time), and '00:00:00' (timer), with buttons for 'S', 'F', 'R', and 'SET'.
- Participant List:** The 'ISCRITTI' list is visible, with participants 1-10 highlighted in green.

Example management module multi race laps and multi points

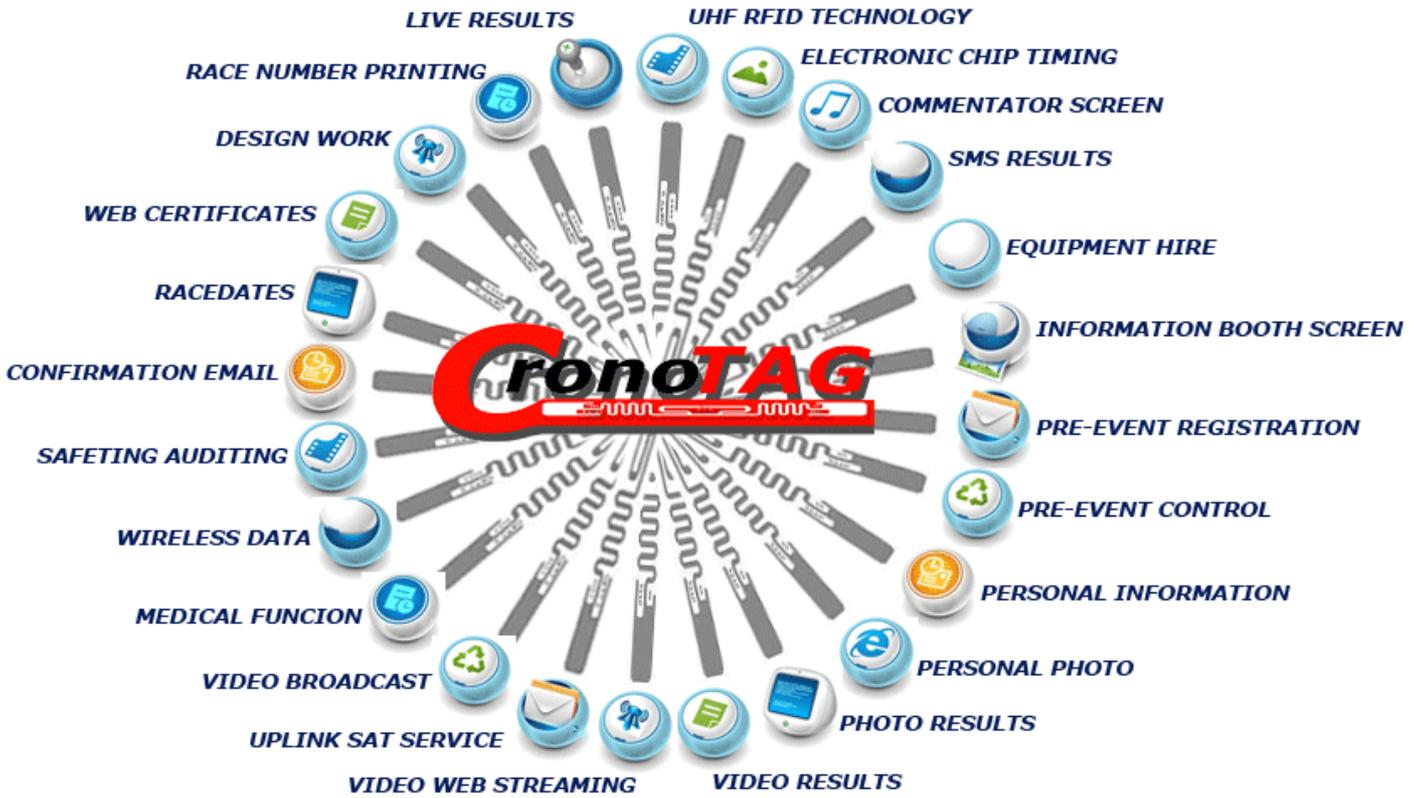
7. The phases of CronoTAG

CronoTAG can be divided into three phases: BeforeRACE - Race - AfterRACE



8. CronoTAG Subsystems

CronoTAG collects various subsystems that are used to manage the entire business process of the sports event.



Below is a small list, not exhaustive, subsystems **CronoTAG**



9. Safety auditing



The organization will be provided with a detailed handbook that will follow every stage of event management.

Technical and operational support will be provided for any official regulations of the National Federations or ester.

GUIDA PRATICA PER L'ORGANIZZAZIONE DI EVENTI DI MTB HC, C1, C2, C3

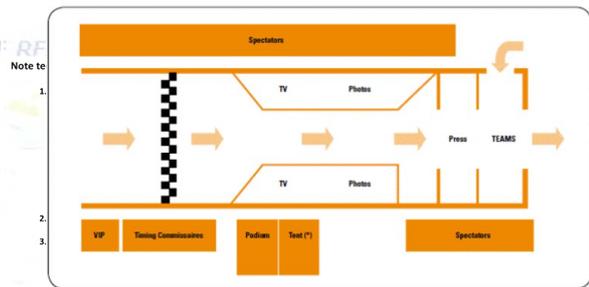
INDICE

PARTE PRIMA – IMPIANTI TEMPORANEI

1. **Informazioni generali**
 - Background storico
 - Normativa
 - Gestione del progetto
2. **Risorse umane**
 - Personale che organizza l'evento
 - Collegio di Giuria
 - Volontari
3. **Progetto e sviluppo del luogo dove si svolgerà l'evento**
4. **Eventi**
 - 4.1 Disposizioni applicabili a tutti gli eventi
 - Informazioni generali
 - Cartina del percorso
 - Cartina per l'organizzazione dell'assistenza medica
 - Cartina per i media
 - Personale del servizio d'ordine a presidio del percorso
 - Arco mobile gonfiabile
 - 4.2 **Cross-Country olimpico (XCO)**
 - Presentazione della disciplina
 - Parametri del tracciato
 - Area di partenza / zona di arrivo
 - Zona di assistenza tecnica / rifornimento
 - Sicurezza e assistenza medica
 - 4.3 **Cross-Country Marathon (CCM)**
 - Presentazione della disciplina
 - Parametri del tracciato
 - Area di partenza / zona di arrivo
 - Zona di assistenza tecnica / rifornimento
 - Sicurezza e assistenza medica
 - 4.4 **Four Cross (4X)**
 - Presentazione della disciplina
 - Parametri della gara



Esempio di Zona di arrivo per XCO / XCM



(*) Un tendone per i corridori che devono salire sul podio e possono cambiarsi e per le interviste in caso di pioggia.

• Zona di assistenza tecnica / rifornimento

Allestire una zona di una lunghezza tra i 75 e i 200 metri, su un tratto pianeggiante o su un pendio in salita, dove la velocità è sufficientemente bassa, e in un luogo abbastanza largo per consentire ai corridori che non prendono alcun rifornimento o quelli che lo hanno già preso di poter passare senza incidenti. L'assistenza tecnica e il rifornimento sono sempre situati sulla destra.

Sul percorso sono allestite, in modo ragionevole, due zone oppure una duplice zona (idealmente, una dovrebbe essere vicina alla linea di partenza).



10. Controllo antidoping
11. Considerazioni ambientali



Le zone devono essere chiaramente identificate.

10. Pre-Event Registration

PRE-EVENT REGISTRATION

System On-Line Management Race: Archive Anagrafico both Gare that of Athletes.

Complete solution for enrollment management.

Have available a complete set of tools for the on-line registration and / or off-line. The system is based on archives Subscribers race already preset where there are already thousands of athletes. The Organiser may choose to enter into its various members and have access to a database with all the athletes or delegate on-line subscription to various athletes / companies. For the athlete / company with the entry process will be quick and easy. The organizer will check the registration fees and payments in real time.

Anagrafica

- Tutti i campi di questa maschera sono obbligatori, quindi è necessario completare tutte le caselle di testo.

Anagrafica

Nella casella Società sono elencate alcune ASD, se la Vostra non fosse presente, inserila cliccando sull'icona alla destra della casella stessa.

Finito l'inserimento dei dati, salvare cliccando sul pulsante **Salva**

Per abbandonare senza salvare cliccare sul pulsante **Ritorna**

N. Tessera★

Cognome★

Nome★

Data Nascita★

Sex★ Maschile

Società★ Seleziona +

Ente★ Seleziona

E-mail

Elenco Gare 2013

Scegli la gara nelle righe sottostanti, poi clicca sull'icona

+ → ↻ 🔍 📄

id	Denominazione	Data	<input type="checkbox"/>
1	Giro di Avezzano	09-06-2013	<input type="checkbox"/>
2	2ª XCO Città di Celano	16-06-2013	<input type="checkbox"/>
3	Villetta Barrea	14-07-2013	<input type="checkbox"/>
4	1° Marathon Rivisondoli	28-07-2013	<input type="checkbox"/>
5	7° TROFEO SCAI SPORT E AVVENTURA	13-10-2013	<input type="checkbox"/>
6	Gran Fondo "San Camillo de Lellis"	22-09-2013	<input type="checkbox"/>
7	Prova Podismo	27-12-2013	<input type="checkbox"/>

Visualizza # 10

V. 0.18.22

11. Pre-Event Control



For athletes who are already in possession of TAG / Chip will control a presence directly via RFID reader with complete autonomy.



12. Confirmation E-Mail



Participants who choose to make use of the on-line registration will receive e-mail confirmation, updates, information and proposals for subsequent races.

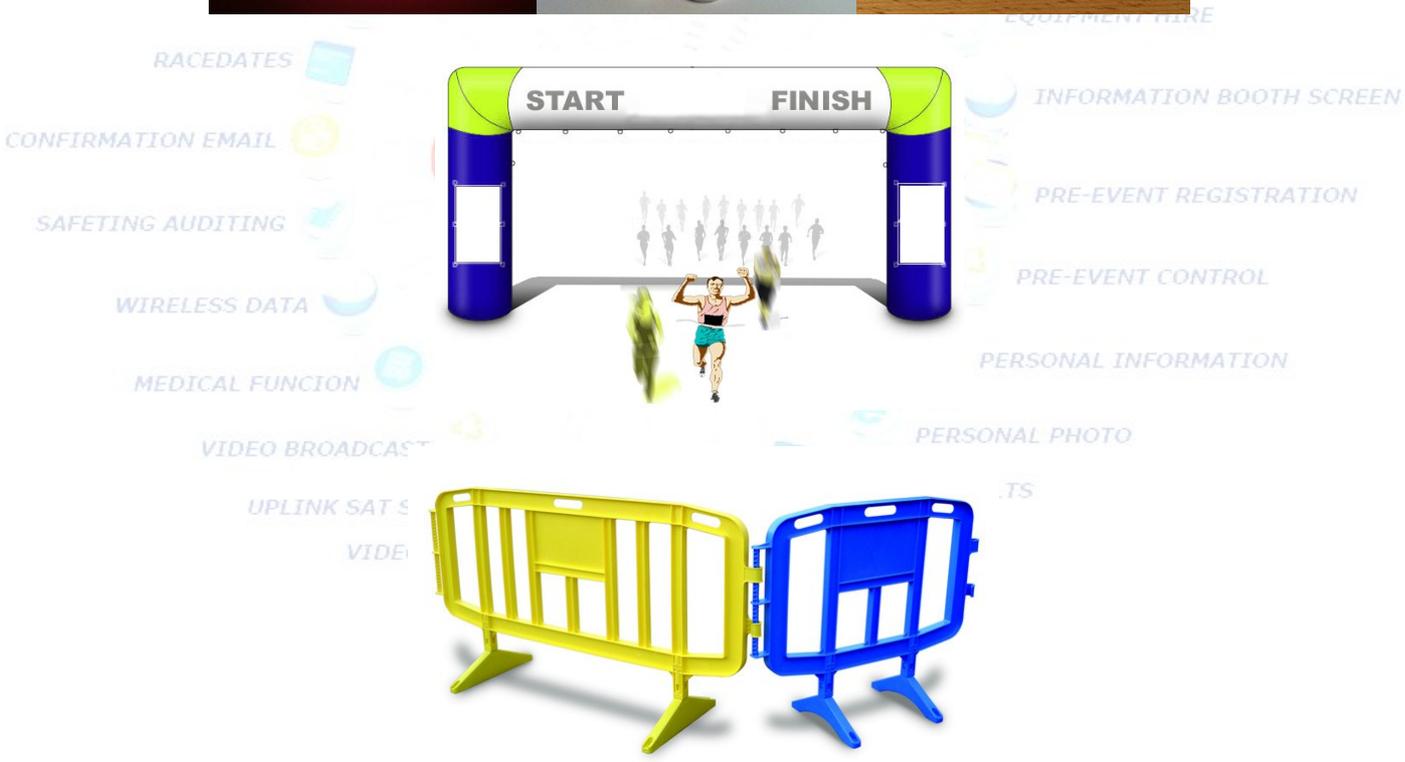


13. Equipement Hire



We can put you in touch with the organizer possible providers of other material which: inflatable, barriers, gazebo, sound system, catering, etc.

SportsMagnets.eu



14. Personal Information



Anagrafica

Tutti i campi di questa maschera sono obbligatori, quindi è necessario compilare tutte le caselle di testo.

N. Tessera*
Cognome*
Nome*
Data Nascita*
Sex*
Società*

Maschile

Seleziona

PERSONAL INFORMATION

The Athlete, independently, can manage their personal information directly from the portal or from terminals made available during the pre-post race.

Anagrafica

- Tutti i campi di questa maschera sono obbligatori, quindi è necessario compilare tutte le caselle di testo.

Anagrafica

Nella casella Società sono elencate alcune ASD, se la Vostra non fosse presente, inserila cliccando sull'icona alla destra della casella stessa.

Finito l'inserimento dei dati, salvare cliccando sul pulsante **Salva**

Per abbandonare senza salvare cliccare sul pulsante **Ritorna**

N. Tessera★

Cognome★

Nome★

Data Nascita★ 

Sex★ 

Società★  

Ente★ 

E-mail

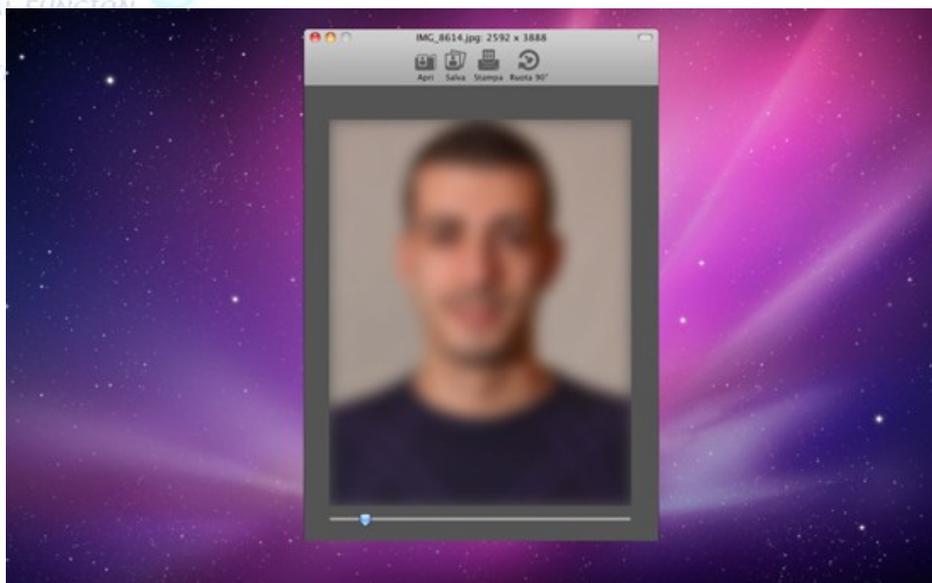
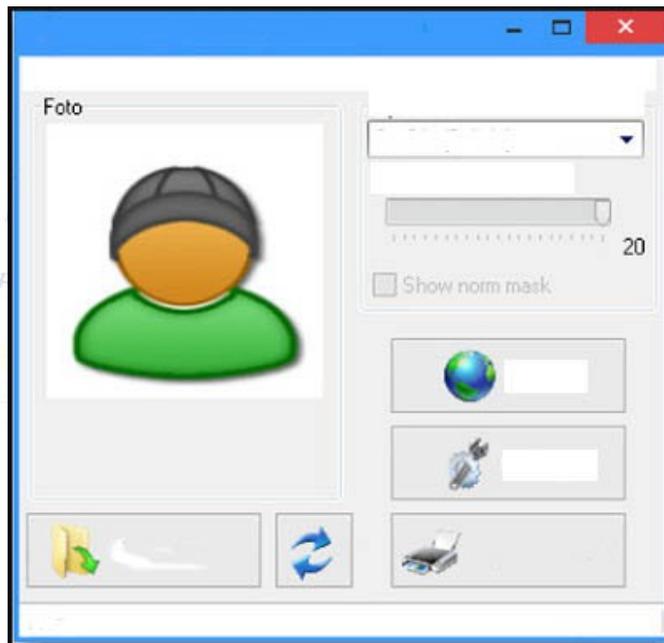
Salva

Ritorna

15. Personal Photo



Every athlete can associate their photos to register system to allow the printing and publication of data and the prize list.



16. RaceDates



Through the website dedicated to the events is free and automatically promotes the event. E 'can advertise sales and promotions organizer.

[Contattaci](#)
[Accesso utenti](#)
[News](#)
[Eventi](#)

Login
Ciao Ago,

Menu Utente
[Il tuo profilo](#)



Ultima data:
Domenica 13 Ottobre 2013 08:00 - 19:00

Location: Antrosano di Avezzano (AQ) | **Città:** Antrosano, Italia



Il TEAM FORTUNATO AVEZZANO e l'AVEZZANO MTB, in collaborazione l'Associazione Culturale Antrosano ed il Gruppo Alpini di Antrosano, promuove la settima edizione della manifestazione di Mountain Bike specialità Cross Country Olimpico "7° Trofeo SCAI SPORT AVVENTURA".

[f](#)
[t](#)
[e](#)
[p](#)
[+](#)
0

17. Medical Function



MEDICAL FUNCTION

It 'a new feature that allows the athlete (during the registration event) to score any allergies, intolerances etc. and however useful information in case of emergency during and after the race. This information will be made available, in a reserved area, the medical staff at the event.

IMPORTANT MEDICAL INFORMATION

Please print in pen before race

Name: _____ Birthdate: _____

Emergency Contact Name & Number: _____

Hotel: _____ Primary Language: _____

Medical History:

- Asthma
- Diabetes
- Heart Disease
- Lung Disease
- Other: _____

Allergies (if applicable):

- Bee Stings
- Medications: _____
- Other: _____

Current Medications: _____

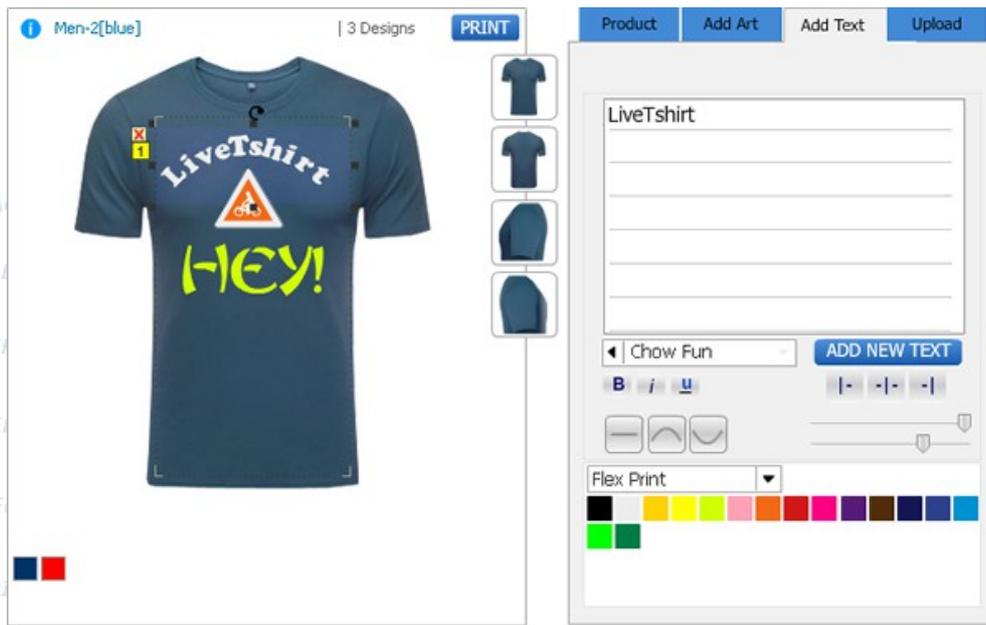
I hereby authorize the release of medical information obtained by any medical personnel or facility of treatment rendered to me for illness or injury incurred during participation in this event.

Signature: _____ Date: _____

18. Design Work



We contact the organizer with structures that manage a website dedicated to design and create Logo, T-Shirt and pectoral race easily and directly from the organizer



Size: M Quantity: 1 \$38.13 ADD TO CART



19. Race Number Printing



Ability to provide the pectoral and race numbers complete with TAG as well as other supplementary materials for the proper management of the event.



325

RACE NUMBER PRINTING

DESIGN WORK

WEB CERTIFICATES

RACE DATES

CONFIRMATION EMAIL

SAFETY AUDITING

WE

P TIMING

ATOR SCREEN

RESULTS

EQUIPMENT HIRE

INFORMATION BOOTH SCREEN

PRE-EVENT REGISTRATION

PRE-EVENT CONTROL

PERSONAL INFORMATION

PERSONAL PHOTO

PHOTO RESULTS

VIDEO WEB STREAMING

VIDEO RESULTS



20. Commentator Screen



Speaker and Reporters sports have available a system "Intranet" for any information race.

ORDINE DI ARRIVO		
1	BUSNELLI MASSIMO	21:01.120
2	CAFFI ALEX	+1.132
3	MEDIANI MAURIZIO	+1.144
4	LIVIO STEFANO	+1.244
5	PERAZZINI GIUSEPPE	+1.356
6	KEMENATER THOMAS	+1.877
7	TAVANO SALVATORE	+2.157
8	CRUZ MARTINS	1 LAP



21. SMS Results



You can send the results via SMS is the end result of the intermediate steps.



WEL

TH SCREEN

CONFIRMATION EMAIL

SAFETING AUDITING

WIRELESS DATA

MEDICAL FUN

VIDEO B

UPL

VENT REGISTRATION

ENT CONTROL

INFORMATION

TO

22. Information Booth Screen



**INFORMATION
BOOTH SCREEN**

Is an information system for the public that allows you to have the information of the pre-race, race and post-race as starting list, and rankings

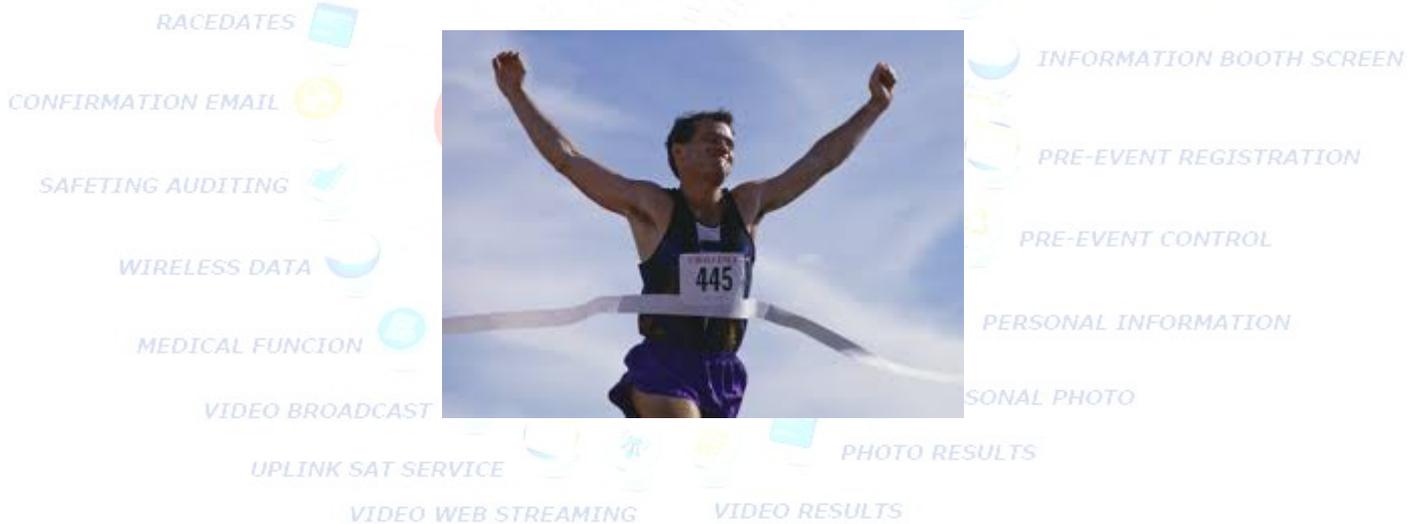
ORDINE DI ARRIVO	
1	BUSNELLI MASSIMO 21:01.120
2	CAFFI ALEX +1.132
3	MEDIANI MAURIZIO +1.144
4	LIVIO STEFANO +1.244
5	PERAZZINI GIUSEPPE +1.356
6	KEMENATER THOMAS +1.877
7	TAVANO SALVATORE +2.157
8	CRUZ MARTINS 1 LAP



23. Photo Results



For every athlete in transit on each detection point is produced relative to the final picture that will be combined or published on the dedicated website



24. Video Results



An automatic system records video on every point arrival / intermediate that can be transmitted in webstreaming. The final video will be posted on the dedicated website and each competitor will rintracciare the precise point of registration.



VIDEO BROADCAST

PERSONAL PHOTO

UPLINK SAT SERVICE

PHOTO RESULTS

VIDEO WEB STREAMING

VIDEO RESULTS

25. Video Web Streaming

VIDEO STREAMING

Live Internet Streaming

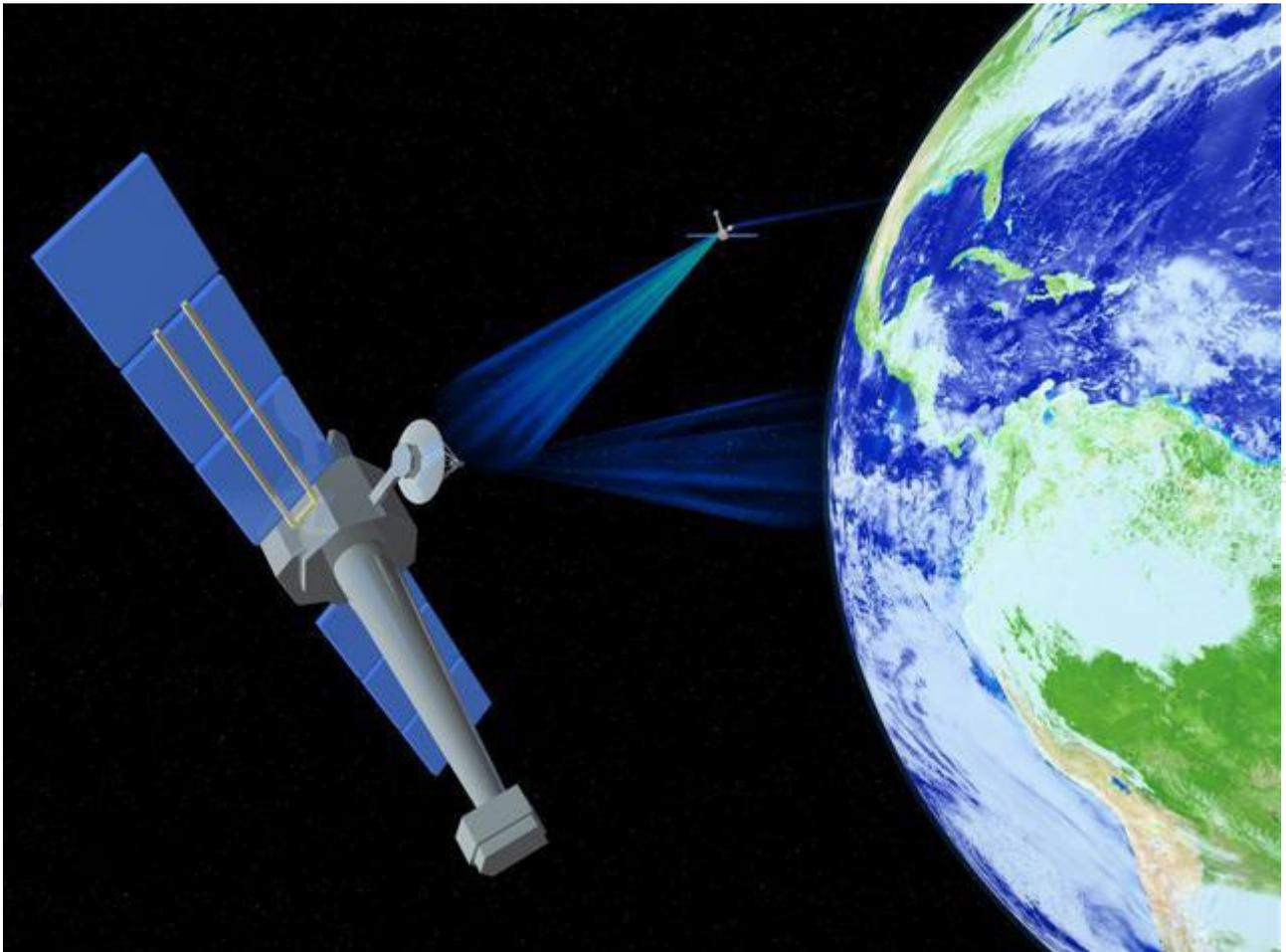
The event will be broadcast live on the web.



26. Uplink Sat Service



If the event requires live television organizers can be put through the organization with the various service providers of live television.



27. Video Broadcast



Is the television graphics subsystem that allows you to send the data overlay of the race to the various television services.

CronoMultiGraphic is software that enables the broadcast "live" of static and dynamic information taken from timing systems and databases and sent to TV directions.

CronoMultiGraphic (version 2) can manage sports competitions with departures "in line" departures "individual" and departures "lane".

It was not designed for the management of a single sport but can be customized and adapted to a large number of types of races (cycling, marathons, boxing, rowing, etc.).

LIVE RESULTS ELECTRONIC CHIP TIMING
RACE NUMBER PRINTING COMMENTATOR SCREEN



28. Wireless Data



The local wireless network, close to arrival, provides real-time information of the race.



29. Live Results



The information of the race (BeforeRace - Race - AfterRace) will be made available on the web in real time



30. Web Certificates



WEB CERTIFICATES

Participants have the ability to print directly from the web, a certificate of participation or to receive it by email.

FINISHER

Finisher Certificate

Jean-Phillippe Pelerin

SWIM	BIKE	RUN	FINISH
0:30:22	1:20:08	0:50:05	2:40:35
1.2 MI	50 MI	13 MI	14.2 MI

VIDEO BROADCAST

PERSONAL PHOTO

UPLINK SAT SERVICE

PHOTO RESULTS

VIDEO WEB STREAMING

VIDEO RESULTS

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Contact:

Accademia del Tempo

Tel. 338.8373141

occhiuzzi@tin.it

info@occhiuzzitag.it