

OpenTrack



Bringing technological solutions
to athletics at every level

OpenTrack

OpenTrack is a new company that aims to make technology accessible in athletics, improving experiences for competitors, officials and spectators alike. We ourselves are runners, and want to see the sport benefit from leaps forward in IT, even at a grass-roots level.

We know that hard-working race officials should be spending their time on the track, and not at a computer for weeks on end, dealing with entries, start lists and results. Similarly, today's competitors don't want to have to wait around for results, or have to crowd around a wall to see the post-its.

Though we are a young organisation, we have proven success in the field. So far, we have dealt with the entries, programmes and general clutter that goes with a County Athletics Championships for 6 counties with more than 3,000 athletes. OpenTrack covers all athletics, so we have also provided the technology for running and recording the Surrey Cross Country League – probably one of the premier cross-country league in the UK. Our highest profile competition so far has been the exhilarating Night of the 10,000m PB's, where OpenTrack not only covered the entries and seedings, but also generated the start-lists for the programme, and most importantly, the near-instant online results. Additionally, OpenTrack provides the technology for the Estonian Athletics Federation.

OpenTrack is a subsidiary of [ReportLab](#), which has been building and managing web solutions for demanding corporate clients for 17 years, and are a global leader in on-demand generating of complex documents.

We are delighted to be able to present the services we can offer to race organisers and club/federation officials. OpenTrack offers an increasingly comprehensive set of event management services:

1. The basic race entry service in which OpenTrack takes the card payments for you, and presents a simple computerised feed of the entries.
2. The more comprehensive competition management system, already favoured by several counties for their athletics championships.

On the results we can either:

1. Simply calculate results from your recordings, or;
2. Provide a service to take times and positions on your mobile phones, or;
3. Automatically upload photo-finish times from FinishLynx, which allows for rapid presentation of results at championships and open meetings.

Finally, we show a few screens presenting our most complex offering of a full Athletics Federation Management package. This provides an umbrella system, with membership management and national championship event set up in addition to the previous components.

We are constantly improving our systems and adding features. Check out our website www.opentrack.run for our updates.

A document like this can only give you a feel for our systems. If you would like us to help with any athletic events, please get in contact, and we can arrange demonstrations.

Andy + Andy

andyw@reportlab.com + andy@reportlab.com

Taking Entries

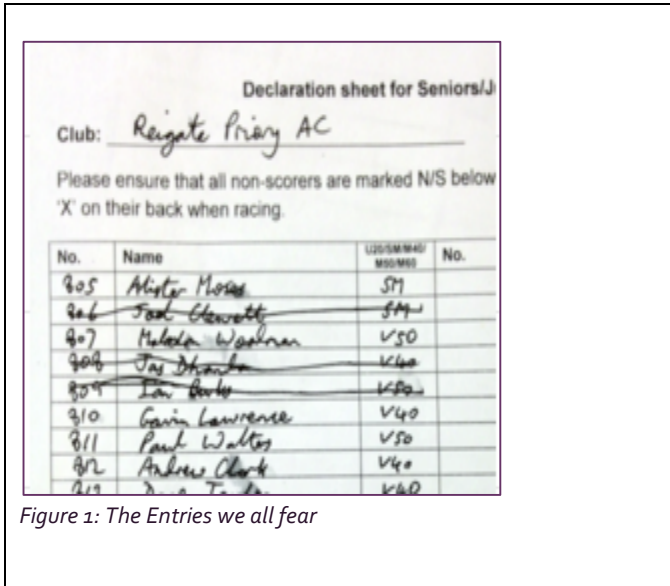


Figure 1: The Entries we all fear

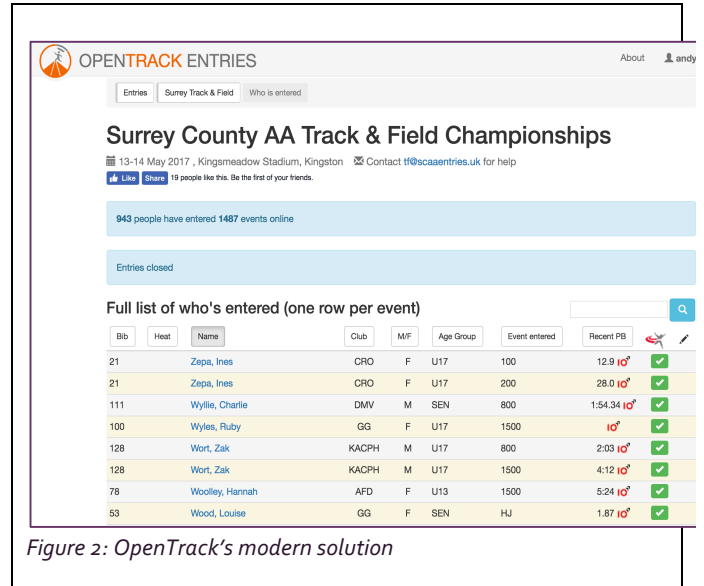


Figure 2: OpenTrack's modern solution

Taking entries

At the simplest level taking entries involves noting down athletes' details and taking a fee. Electronic entry taking solves countless problems. There is no dealing with cash or cheques – we can automatically check EA licences, automate different pricing levels for juniors, control age related entries, store expected times for seeding, and even manage merchandise sales.

In club fixtures such as league and relay events there is an additional workload on both the team captain and the race organizer. Once entries have been paid for, the team declaration giving the names of the athletes still has to be completed, and in the case of relays, so does the running order. This is where the much dreaded bits of paper shown in Figure 1 come in. The race organiser receives these and has to somehow make sense of them, hoping they can read the

hand writing, and praying the paper has not got soaked in the rain.

Our system streamlines the process, allowing the team managers to select their athletes and allocate numbers accordingly using their phone or other internet connected device up to the start of the event. Figure 2 shows a rather more modern solution to the problem.

Once the organiser has the events stored, then OpenTrack can allocate numbers, contact entrants, or simply dump the data into Excel. How you chose to use OpenTrack is highly flexible.

This is our simplest offering, if you know how to organise your race but want to avoid the hassle of dealing with payments and typing in names and events, this is your ideal solution. With minimal training, you can even set up your own events on our system.

Competition Management

Large and Complicated Meetings

For bigger and more complicated events, such as county athletics championships, the entries are only the start. Seeding lists, field cards and many other reports have to be produced across multiple age groups.

Once OpenTrack has taken your entries, we already have your competitors' details in our database. We can easily generate the bib-numbering for you, hassle-free. Once we also have your event timetable uploaded, (we are working on a grid upload for next year) we can even generate PDF files combining all this data. And even when the weather forces those rushed last minute changes, it still takes mere seconds to regenerate the updated reports.

To the right you can see the automatically generated Field Cards (figure 3) and Seeding Sheets (figure 4) that were used this May in Surrey. You can also choose to add branding to these cards.

Below you can see the options available to administrators. A popular innovation this year was individual numbers. Colour coding makes sure that no one is in the wrong age group, and clear event listings mean your athletes have no excuses left for missing their event. Using the pdf expertise, developed over the years with ReportLab we work with a digital printer to publish these, contact us for details.

Figure 3: Field Card

Page 2

Senior Mens Hammer Throw Sat 10:00

DISTANCE SCORE CARD | Event No: F001 | Time: Sat 10:00 | CBP: Gareth A Cook 1989 - 66.28

Meeting: Surrey County AA Track & Field Championships | Date: 2017-05-13 | Venue: Kingsmeadow Stadium, Kingston

#	Bib	Name	Club	1st Trial	2nd Trial	3rd Trial	Best of 3 Trials	4th Trial	5th Trial	6th Trial	Best of all Trials	Final Position
				Metres	Metres	Metres		Metres	Metres	Metres		
1	92	Steve Simmonds	KACPH									
2	50	Paul Derrien	SMRAC									
3	95	Rob Smith	WAL									
4	94	Chris Smale	SD									
5	45	Gareth Cook	KACPH									
6	57	Ian Frankish	EE									
7	98	Kyle Stevens	KACPH									
8												
9												
10												
11												
12												
13												
14												
15												
16												

RESULTS

Place	No	Name	Club	Metres	Place	No	Name	Club	Metres	Judges
1st					7th					
2nd					8th					
3rd					9th					
4th					10th					
5th					11th					Field Referee
6th					12th					

Printed on 24 May 2017 11:13:26

Figure 4: Seeding List

Seeding Sheets

T017: Senior Mens 5000m Sat 12:35
(22 Athletes entered)

Tick	Bib	Last Name / First Name	Club	Perf
	66	Hoad, James	THH	14:51
	93	Slimeck, Frederick	HW	14:53
	100	Toomer, Benjamin	HW	14:58
	87	Robinson, Alex	HW	15:00
	65	Higgs, Tom	SLH	15:26
	90	Sharp, Matthew	HW	15:29
	55	Fitzpatrick, Sean	HHH	15:30
	33	Auden, Ed	BEL	15:41
	107	White, Kieran	HW	15:49
	59	Goldsworthy, Simon	GG	15:50
	102	Tuer, Robert	HW	15:56
	82	Ollington, Richard	THH	16:00
	79	McDaniel, Matt	GG	16:10
	91	Shearring, Luke	HASB	16:15
	52	Earl, Jonny	HW	16:22
	70	Impey, Nick	RAN	16:43

Administrators control panel

The screenshot shows the OpenTrack Entries web interface. At the top, the browser address bar displays <https://entries.opentrack.run/2017/surreytf/admin/>. The page header includes the OpenTrack logo and the text "OPENTRACK ENTRIES". Below the header, there are navigation tabs for "Entries", "Surrey Track & Field", and "Admin". The main content area is titled "Surrey County AA Track & Field Championships" and includes the dates "13-14 May 2017" and the location "Kingsmeadow Stadium, Kingston KT1 3PB".

The "Event Management" section contains several panels:

- Match Configuration:** Includes a "Match configuration" link.
- Staff entries:** Includes links for "Early or late entries" and "Check-in Desk".
- Download Reports:** Includes links for "Simple Report" and "Detailed Report".
- Emailing:** Shows "2 total messages in list" with "View" and "Compose" buttons.
- Numbering:** Shows "943 / 943 have numbers." with a "Remove numbers" dropdown and an "Apply" button.
- Printables:** Lists various documents: "Field Cards", "Race numbers (bibbs) - XC", "Race numbers (bibbs) - TF", "Registration Sheets", "Seeding Sheets", "Athletes (A-Z)", and "PDF programme".
- FinishLynx:** Lists "PPL (people)" and "EVT (events)".

The footer of the interface indicates it is "powered by ReportLab". The browser's taskbar at the bottom shows several open files, including "surreytf_seeding_sheets.pdf", "surreytf_field_cards.pdf", "booking_LON_Flights1....ics", "results - prize winners.pdf", "gbr results history.xlsx", and "funnels_for_geeks.xls".

Surrey County Race Number

The graphic features the Surrey County AA crest on the left and the OpenTrack logo on the right. The text "SURREY COUNTY AA" is prominently displayed in the upper center. Below this, the race number "45" is shown in a very large, bold, black font. At the bottom left, a green bar contains the name "Lisa O'Brien - SW (WAL)" and the event schedule: "Sat 10:30 - HJ FINAL, Sat 15:30 - LJ FINAL, Sat 16:30 - JT FINAL, Sun 12:30 - SP FINAL". At the bottom right, the ReportLab logo and a "PRINT" icon are visible.

Road and Cross Country Results

Once the entries have been taken and numbers allocated the athletes may think there is surprisingly little left for the organiser to do: simply start the race and record the finishing times or distances. Individual and team positions, and prizes, can all be worked out from these inputs. Race organisers know otherwise...

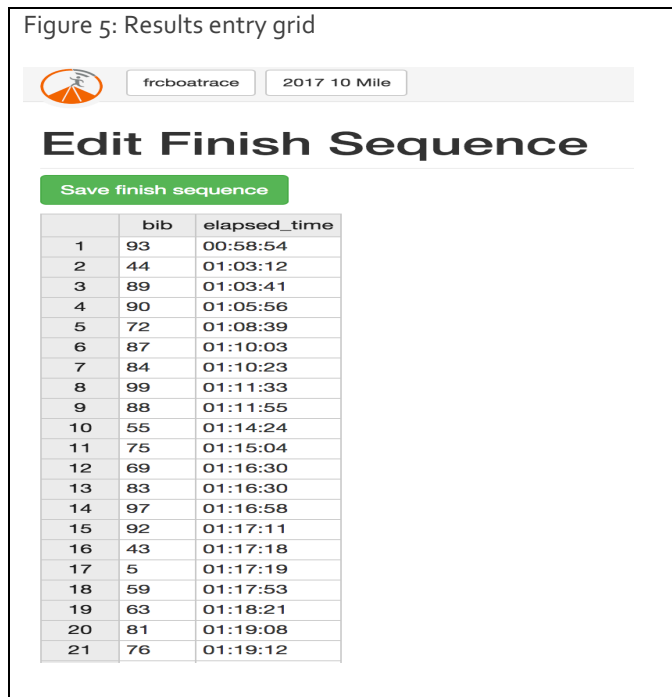
Traditionally timed results

All clubs have volunteers who have spent many years mastering the skills of funnel management, and recording the times and bib-numbers of finishers. In these events, timing is typically only accurate to within a second, although usually it is the position that matters more than precise times.

For these clubs, we make it simple to calculate and display the results. Using the data in our system from the entries, all we need are 2 columns of data showing bib-number and time. Paste these into our website (figure 5), and OpenTrack will automatically look up names, categories and teams from the entries list, and calculate team scores and prize winners live (figure 6).

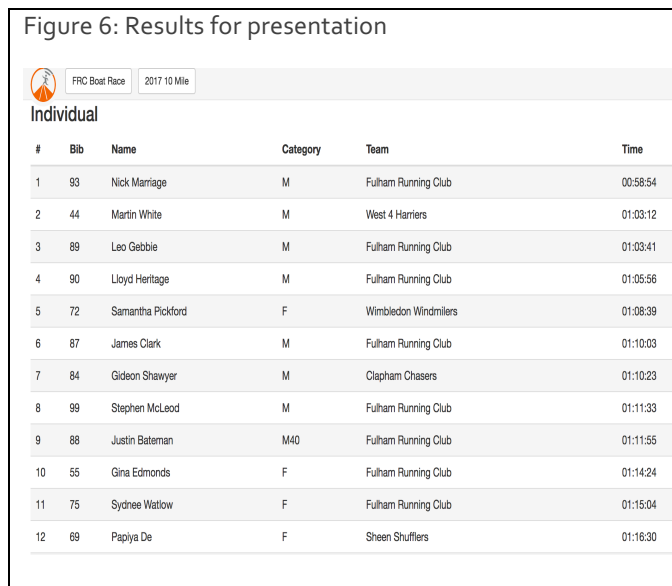
We have experience of calculating team scores for the Men's and Women's Surrey Cross Country Leagues, with multiple divisions in one race and some of the most ferociously complicated second claim and team rules it is possible to imagine.

Figure 5: Results entry grid



	bib	elapsed_time
1	93	00:58:54
2	44	01:03:12
3	89	01:03:41
4	90	01:05:56
5	72	01:08:39
6	87	01:10:03
7	84	01:10:23
8	99	01:11:33
9	88	01:11:55
10	55	01:14:24
11	75	01:15:04
12	69	01:16:30
13	83	01:16:30
14	97	01:16:58
15	92	01:17:11
16	43	01:17:18
17	5	01:17:19
18	59	01:17:53
19	63	01:18:21
20	81	01:19:08
21	76	01:19:12

Figure 6: Results for presentation



#	Bib	Name	Category	Team	Time
1	93	Nick Marriage	M	Fulham Running Club	00:58:54
2	44	Martin White	M	West 4 Harriers	01:03:12
3	89	Leo Gebbie	M	Fulham Running Club	01:03:41
4	90	Lloyd Heritage	M	Fulham Running Club	01:05:56
5	72	Samantha Pickford	F	Wimbledon Windmilers	01:08:39
6	87	James Clark	M	Fulham Running Club	01:10:03
7	84	Gideon Shawyer	M	Clapham Chasers	01:10:23
8	99	Stephen McLeod	M	Fulham Running Club	01:11:33
9	88	Justin Bateman	M40	Fulham Running Club	01:11:55
10	55	Gina Edmonds	F	Fulham Running Club	01:14:24
11	75	Sydney Watlow	F	Fulham Running Club	01:15:04
12	69	Papiya De	F	Sheen Shufflers	01:16:30

Finish line electronic recording

OpenTrack also incorporates timing and recording tools, which have been tested at many different levels from the European Cross Country Championships to local club matches. We have had “officials” using it varying in age from 11 years old to 70. We believe that it should be possible to run a small or medium sized fixture with nothing but mobile phones to record the data. This system removes all need to transcribe data by hand, with all of its errors and delays and the problems of illegible handwriting become a thing of the past.

Once a fixture has been set up, the user can simply connect to a website and become an official. OpenTrack can be used almost anywhere: the only requirement is a 3g/4g signal or a local wifi signal at the track. Even if reception is lost midway through the fixture, results can still be entered and will be stored locally until the phone is back in an area of reception.

The timing feature (figure 7) is simple. The user hits the green button each time a runner crosses the line. Every few runners, they can also enter the bib number to simplify error checking.

Another team, at the end of the funnel, enters the bib numbers onto OpenTrack as the runners pass through. Everything is digital – there are no messy pieces of paper, and the results can be calculated instantly.

The bib numbers automatically link to the athletes and live provisional scores can be calculated (figure 8). Any system is only as good as the data that goes into it, so data should of course be checked and verified before being made official.

Figure 7: Timing App

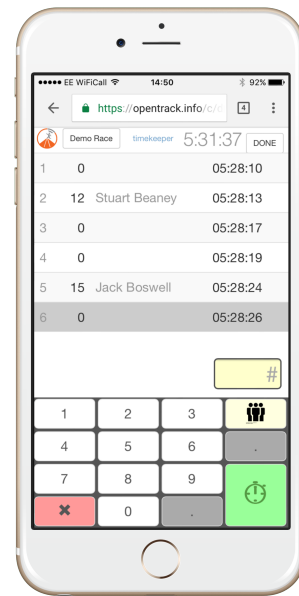
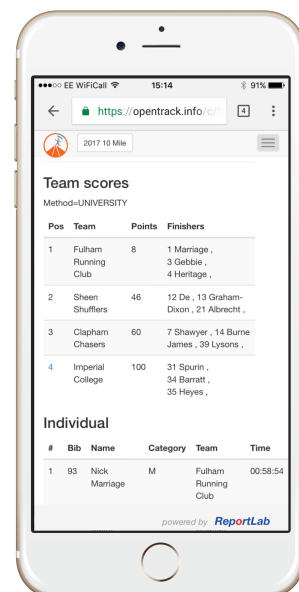
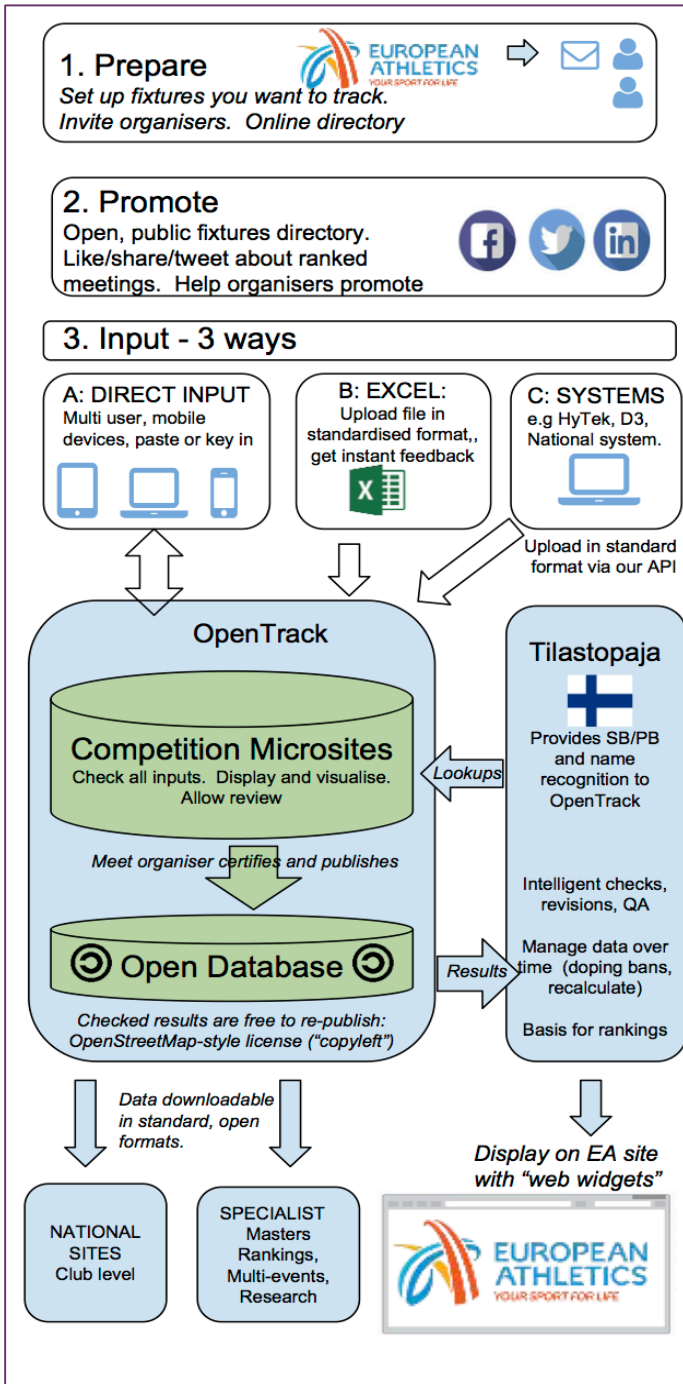


Figure 8: Results Display



Athletics Results

European Data Capture Project



We have been working with European Athletics on a project to ease the capture and transmission of athletics data.

The project allows the organisers of key events to upload results into a central database so EA can monitor and rank their top athletes.

Our work aims to produce a global data standard, so all data is transmitted in an established format, with methods to make transmission by Meeting Organisers simple. To this end, we have developed code that works with FinishLynx, the most widely used photo-finish system.

From our entries database, we produce the FinishLynx data files, and as soon as the results are approved they can be uploaded to OpenTrack on the spot. This was implemented successfully in the Night of the 10,000m PBs (figure 9)

Figure 9: Night of the 10,000m PB's

The screenshot shows the OpenTrack Entries interface for the 'Night of the 10,000' event. It displays a table of individual results for Men's GB Trials, including athlete names, clubs, age groups, and times. The results are sorted by time, and each entry includes a 'PB' icon indicating a personal best.

#	Bib	Name	Club	Age Group	Time	Note
1	215	Vernon, Andrew	AFD	SM	28:21.15	
2	81	Griffiths, Dewi	SWAN	SM	28:31.88	
3	10	Barata, Samuel	BENFI	PRT	28:40.19	PBI
4	182	Serrano, Ricardo		M35	28:46.38	PBI
5	33	Connor, Ben	DERBY	SM	28:46.45	PBI
6	214	Van Nunen, Bart	Pallas '67	NLD	28:57.73	PBI
7	209	Tsegay, Abel	INVEK	ERI	28:59.63	PBI
8	40	Cross, Ellis	USTMA	SM	29:00.49	PBI
9	24	Caldwell, Luke	UICL	SM	29:01.76	
10	177	Rush, Graham	CHECH	SM	29:04.52	PBI
11	99	Jones, Kristian	SWAN	SM	29:05.66	PBI
12	1	Aadan, Mohamud	TVH	SOM	29:08.94	PBI

We can also work on generating microsites for organisers who want to generate and display results rapidly.

National Federations/Organisations

At OpenTrack, we have experience of working directly with athletics organisations in most aspects of management and administration. Our main clients so far are the Estonian Athletics Federation, who control athletics nationally, and the British Masters' Athletics Federation, which is the umbrella organization for masters' athletics.

Federation Management

Federations have to be able to manage membership efficiently. In Estonia, competitors need a licence, for which there is an annual fee. To the right (figure 10), you can see our systems for managing athletes, their clubs and their membership status.

We have similar systems for listing coaches and their athletes, authorised sports facilities and listing national competitions.

Figure 11, shows some of the more cutting-edge work to allow clubs to enter teams for relays. Here we have the Estonian Youth Relays (Noorte teatejooksude). Our system allows team managers to pick their teams from club members of the correct age group and gender, with the click of a button. Athletes, or just the order, can be changed on a mobile phone by the trackside.

The race organiser gets the most up to date teams, electronically, before the race starts.

Figure 10: Federation management

Name	Coach	Club	ALL	Date of birth	Licenced
Meelis Veilberg		VIKE	---	11/03/1961	✓
Ago Veilberg		VIKE	---	08/01/1963	✗
Andrus Maista		TREEN	---	21/02/1964	✗
Merike Muru		SPART	---	07/08/1966	✗
Tiina Tross		TAPPS	---	07/06/1967	✓
Raido Raspel	Urmas Randma	TREEN	---	07/10/1967	✓
Vjatseslav Košelev	Jevgeni Terentjev	SILLA	---	20/01/1968	✓
Indrek Mumm		SPART	---	01/08/1968	✗

Figure 11: Relay team entry

Club	Name	Runners
AUDE	MU20 4x1500	1. Peeter-Kait Kallas 2. Mihkel Talivee 3. Ekvard Joakit 4. Ivar Käsper
AUDE	MU18 4x1500	1. Sander Radik 2. Igor Andrejev 3. Ken Mark Minkovski