

## 40 YEARS OF FORMULA 1<sup>™</sup> SUCCESS



### **PHG INTRODUCTION**

Founded in 1985 by Philippe Gurdjian, PHG International has become the benchmark in creative circuit design. Our involvement with Formula 1 started with the promotion and organisation of Grand Prix events which led Philippe to being awarded 7 times best Grand Prix promoter.

His dedication allowed him to better understand circuit design, bringing together the best people around him to upgrade existing tracks such as Magny-Cours & Barcelona Circuit, but most importantly supervise the construction of new circuits, Kuala Lumpur Sepang & Bahrain International Circuit.

Over 30 years, PHG International has pushed the boundaries and set new references in the motorsport industry. Circuit Paul Ricard became in 2000 the safest race track in the world, and Yas Marina Circuit in Abu Dhabi was the perfect example of how we were able deliver to our clients the most beautiful circuit in the world, respecting traditions and creating a design with understanding of operations and event promotion.

His son Carl took over the company in 2014 after Philippe passed away. His passion for motorsport has inevitably pushed him to continue the PHG legacy, working closely with Formula 1, Formula E and the World Endurance Championship. The experienced gained and his dedication is fuelling his ambition to create the next generation of race tracks; as his father used to say...



"Perfection does not exist, let's keep innovating for the benefit of all".



PHG International specialises in the conception, design, construction and operation of motor sport circuits and test tracks around the world.

- Masterplan and Design
- Organisation and development consultancy
- Audit of circuits: infrastructure, safety and security
- Development and implementation of safety solutions and new technologies
- Artistic and architectural management
- Project Management: Design and construction
- Grand Prix promotion
- Events organisation
- Budget and cost modelling
- Sustainability studies

#### 28 SUCCESSFUL FORMULA 1<sup>™</sup> GRAND PRIX

- 2009 Abu Dhabi Grand Prix
- 2004 Bahrain Grand Prix
- 2001 2009 Spanish Grand Prix
- 1998 2002 Malaysian Grand Prix
- 1985 1998 French Grand Prix

#### AWARDS

- FIA Institute 1st Centre of Excellence:
- HTTT Paul Ricard Circuit (FR) 2006
- FOCA Promoters Trophy
- Best organisation: Seven times

#### FESTIVAL INTERNATIONAL DE L'AUTOMOBILE

- Most beautiful Race Track:
- Sepang International Circuit, Malaysia 2001
- Most beautiful Race Track:
- HTTT Paul Ricard Circuit, France 2005
- Architecture Grand Prize:
- Yas Marina Circuit, UAE 2010



#### CARL GURDJIAN

2007 Babson College graduate with a double major in Entrepreneurship & Marketing, Carl spent five years with Ferrari North America and Ferrari Asia Pacific as Marketing Manager before joining PHG International.

His international background enabled him to develop new areas of expertise in the luxury, sport and automotive industries. He took over the company in 2014 following his father's passing and has been expending the business ever since.

#### SIMON GIBBONS

Simon has a well established career in planning, design and project management in the major events industry, involving some of the world's most high profile sporting occasions including F1<sup>™</sup> and Olympic Games.

After nine years with Formula One Management, now recognised by the FIA for international track design after succesful delivery of Formula E street circuits and an active member of the FIA Industry Working Group.

#### JAY CROSS

Jay has spent over 25 years in the creative industry with a high profile portfolio in sports, luxury brand and automobile markets.

During five years in the UAE he played a key role with Philippe Gurdjian in the branding of Yas Marina Circuit. Since then he has worked on the Diriyah E-Prix and Extreme E events in Saudi Arabia as well as with luxury car brands and several prestigious international sailing events.





## SEPANG INTERNATIONAL CIRCUIT MALAYSIA





- Completed March 1999
- Construction period 16 months
- Overall site 264 ha
- Track length (F1<sup>™</sup>) 5.543 km
- Track width 14-18m
- Turns (F1™) 15
- 3 Track solutions
- New safety solutions

- 33 F1<sup>™</sup> garages 6,500 sqm
- F1<sup>™</sup> paddock 10,800 sqm
- Support paddock 8,600 sqm
- Support garages 1,875 sqm
- Main pit buildings 9,030 sqm
- Media centre 1,200 sqm
- Spectator seats 80,000
- Event capacity 130,000

<u>1998 1999 2000 2001 2002</u>

## HIGH TECH TEST TRACK PAUL RICARD





- Built 1969
- Re-design completed 2004
- Construction period 12 months
- First High Tech Test Track in the world
- Overall Site 70 ha
- Development of the TecPro Barrier safety solution
- Development of the first video tracking system

- Development of night lighting for the Singapore F1<sup>™</sup> Grand Prix
- Creation of 24ha asphalt run-off
- Track length (F1™) 5.861 km
- Track length (max) 6.093 km
- Track width 10-12m
- Turns (F1™) 15
- 167 Track solutions











- 24 F1<sup>™</sup> garages 3,890 sqm
- F1<sup>™</sup> paddock 13,440 sqm
- Main pit buildings 5,865 sqm
- Media centre 500 sqm
- Spectator seats 5,000
- Event capacity 15,000
- Hôtel du Castellet \*\*\*\*\*
- Le Castellet International Airport

<u>2001 2002 2003 2004 2005 2006 2007 2008</u>

## BAHRAIN INTERNATIONAL CIRCUIT BAHRAIN













- Completed March 2004
- Construction period 16 months
- Overall site 84 ha
- First F1<sup>™</sup> circuit to apply runoff and TecPro technology from HTTT Paul Ricard Circuit
- Track length (F1<sup>™</sup>) 5.412 km
- Track length (max) 6.299 km
- Track width 14-15m
- Turns (F1<sup>™</sup>) 15
- 6 Track solutions
- 39 F1<sup>™</sup> garages 5,735 sqm
- F1<sup>™</sup> paddock 18,500 sqm
- Support paddock 1,625 sqm
- Support garages 2,945 sqm
- Main pit buildings 8,100 sqm
- Media centre 1,740 sqm
- Spectator seats 45,000
- Event capacity 70,000
- Royal Tower



## YAS MARINA CIRCUIT ABU DHABI





- Completed October 2009
- Construction period 18 months
- Overall site 159 ha
- Track length (F1™) 5.554 km
- Track width 14-17m
- Turns (F1™) 21
- 7 Track solutions
- 4000m of TecPro safety barriers
- 40 F1<sup>™</sup> garages 5,920 sqm

- F1<sup>™</sup> paddock 13,300 sqm
- Team VIP hospitality suites
- Support paddock 9,060 sqm
- Support garages 3,060 sqm
- Main pit buildings 7,900 sqm
- Media centre 3,600 sqm
- Spectator seats 45,000

Event capacity 50,000



Concepts: Entertainment Sustainability Creativity



### TYCOONAIRE -THE MOST UNIQUE LUXURY MOTORSPORT RESORT



#### OUR VISION

Our Vision is to build the world's first luxury, sustainable, safe and secured private driving pleasure resort with a focus on car collectors.

A new class of Real Estate Investments combines the automobile enthusiasm with a luxury resort of compelling high tech. A complete new dimension of Green Luxury visionary intention. Built by F1 racetrack experts, influenced by contemporary architecture, fed by green technology, this resort is the start for a new luxury brand for MEMBERS ONLY.

This cutting edge project is based on a visionary concept, that combines automobile enthusiasm with family life and green luxury lifestyle. It is sustainable feasible and technological progressive. Ecologically backed up within an easy to reach location this resort lives the ambition to future trends and innovative execution. The win-win strategy with its cross discipline orientated experts and partners and trust-worthy investors fulfills the competence of a team that can deliver a successful development, that is a blueprint for a series of new Sport Driving.

#### ROAD CIRCUIT AT THE HEART OF THE RESORT

- A unique 10km road circuit reserved for special members. The facility will have dedicated boxes and maintenance services along with a classic car department. Its layout will adapt to the nature of the site using the latest safety features. With a focus on sustainability, priority will be to involve 'Green Technologies' to operate the site, positioning it as the world's first sustainable road circuit.
- The pit building will showcase dedicated show room spaces for car manufacturers in order to perform products.

#### ECONOMICAL & ECOLOGICAL IMPACT

- This unique luxury motorsport will attract and generate growth for local and international businesses and suppliers. It will help create more than 250 jobs in addition to involving local businesses on a daily basis.
- The training centre dedicated to employees will provide services for the hotels and restaurants in the region.
- The use of green technology and sustainable energy for the Resort and the Road Circuit will reduce operational costs and will aim to act as a lab for future sustainable solutions.
- The Tycoonaire Project will be replicated around the world in order to offer different experiences to its members. Its unique concept will attract HNWI from all around the world and will set a new benchmark



### TYCOONAIRE -THE MOST UNIQUE LUXURY MOTORSPORT RESORT

#### LUXURY RESORT

- 2,500 acre property including 250 acre vineyard
- 5 star Luxury Hotel & Spa including:
  - Michelin star restaurant
  - Shop
  - Movie theatre
  - Spa & Fitness / Wellness Centre
  - 30 Private Villas with Hotel service located around the lake
  - Business Centre
- 3 Star Hotel with 120 rooms

#### **SPORTS & ENTERTAINMENT**

- 4X4 Off-Road circuit
- Polo field
- Tennis Courts
- Shooting Centre
- Mountain bike tracks
- Running track
- 9 hole Golf course

#### TRAINING CENTRE

- 150 housing facility for the employees
- Dedicated trainers for the employees:
  - Luxury Hotel
  - Wine production
  - Olive Oil & Lavender production
  - Sport & Classic cars maintenance
  - Advanced High Tech Medical Centre for top sportsmen, race car drivers, etc











### HIGH TECH GREEN TRACK -THE 1<sup>ST</sup> SUSTAINABLE MOTORSPORT SITE



#### THE CONCEPT

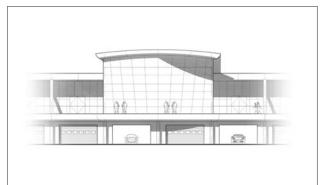
The HTGT Rivesaltes Circuit - High Tech Green Track - will be the 1st circuit in the world conceived on an architectural concept based on a policy of sustainable development, a facility managed on renewable and/or recoverable energy, and created around a real environmental strategy.

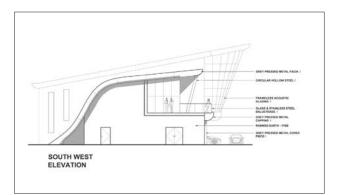
It will bring in parallel all the technological innovations in safety and electronic information to users.

The developed design will be a showcase for all circuits in the world and the unique platform for the development or presentation of electric or hybrid vehicles.











### HIGH TECH GREEN TRACK -THE 1<sup>ST</sup> SUSTAINABLE MOTORSPORT SITE

#### SUSTAINABILITY & ENVIRONMENT

The High Tech Green Track (HTGT) project involves the design and construction of a 3.5km motorsport circuit on a 46ha site of fallow waste land approximately 10km north of Perpignan in the Languedoc-Roussillon region. The circuit will be for private activities, testing and events.

The HTGT will focus on sustainable development initiatives in both construction and operation, and the "Green" concept design will include the investigation into new systems relating to architectural design and the environmental impact of the track activities. High security and technology solutions will also be included in the design. The aim is to create the first "Green" circuit in the World and accordingly become the world reference for future circuit developments. The effects on the local environment from track activities in terms of noise impact, vibration, air and water pollution will be addressed with the development of unique technical solutions. Track operations will be developed in support of initiatives made in the automobile industry and motor sport series, including the use of bio-fuels and electric vehicles.

Energy consumption will be provided from alternative sources, including photovoltaic and waste processing. Specialist consultants together with support from research and development organisations will be engaged during the design of the pit building (lighting, air conditioning and heat, etc...), and of the track systems.



## Development Processes Race Organisation Event Promotion



### **DEVELOPMENT PROCESS**

) APPRAISAL & DESIGN BRIEF

) CONCEPT DESIGN

DESIGN DEVELOPMENT

) DETAILED DESIGN

) CONSTRUCTION MANAGEMENT

D

**CIRCUIT MANAGEMENT** 

RACE ORGANISATION

The stages in the Development Process deliver increasing levels of detail and will determine decision making and funding.

The initial appraisal of a development plan involves a review of the client mandate and assessment of the proposed site and overall project viability. The Design Brief summarises the conclusions of this process and clearly defines key objectives.

The Concept Design will form the basis for the future design stages and comprises overall master-plans and building concepts. The outline track design will reflect FIA safety guidelines and will combine the very best of modern race circuits. The conclusion of stage C is usually a significant project milestone and decision point.

The appointment and management of professionals in the fields of architecture and engineering will be supported by PHG International, through the process project and budget management, planning and approval all the way to completion and handover. Further recommendations will be made in the selection of motorsport experts in "Special Electronics" and Track Systems.

The FIA Homologation Dossier will be compiled to achieve FIA track licence approval, working closely with the ASN and FIA Safety Department.



### **A1: PROJECT MANDATE**

The Mandate is a statement of the desired project outcome. This short report will be supported by basic images, providing an overview of the project concept and ideas. The Mandate may be prepared jointly with the client and is essential to establish initial expectations.

### **A2: PROJECT APPRAISAL**

The Appraisal is an assessment of the initial project proposal – a sense-check of basic ideas, locations, programme and possible solutions.

The appraisal may refer points to the overall business case and may make reference to proposed track activities and in particular international series such as F1, WEC and FIA Formula E.

### **A3:** PROJECT BRIEF

The Design Brief defines the overall aims of the project design, construction and operation.

- Review of Mandate A review of the initial
- Mandate to verify the aims of the project, the basis for how the circuit will operate and the planned activities
- Project Approach An outline of the proposed solution and overall project strategy
- Project Team An organisational structure with roles and lines of reporting
- Project Risks An Initial assessment
- Project Stage Programme including Client expectations
- Project high level cost / Client budget
- Land Use Plan (1:10,000) An existing plan overlaid with proposed land uses and areas
- Illustrative Site Plan (1:10,000) A plan showing the overall development, proposed circuit and major building locations, access roads, circulation and areas of landscaping

An early site visit is essential to enable an understanding of the nature of the location and how the circuit will fit with the overall resort master-plan. This may be carried out in conjunction with the Project Architect.

The Design Brief will outline the project process, commercial guidelines and may make recommendations of future strategy. A review of the design and build procurement method will be made at this stage.



### **B1: CONCEPT DESIGN**

The Concept Design will be the first interpretation of the Brief with various solutions in the form of drawings, plans and rendered images.

- Executive Summary
- Vision Statement
- Narrative on Design Options
  "Philosophy" of the design In particular the expectations of the client in terms of "look and feel" and the quality
- Design Guidelines the philosophy and expectations will be translated into guidelines for use during the later stages of the design and construction stages of the project
- Analysis of the site and local surroundings
- Site Master Plan (1:2500)
- Definition of plots and zones
- Site Constraints
- Access and circulation diagrams, including track service roads
- Key building footprints and General
- Arrangement plans
- Exterior 3D Perspectives of Buildings and key
- Site Views
- Project Cost First Stage estimates and bulk quantities
- Project Programme

Topographical surveys, soil and site investigations will all have input into the suitability of the track and building design, and these studies will need to be commissioned at this stage. Site visits are essential to understand the environment and topography.

### **B2: TRACK DESIGN**

In consultation with FIA and ASN to ensure acceptance of design, the outline track design will be prepared with detailed descriptions and options for consideration.

During this process a professional driver will be involved to provide input into the track design, in addition to engineering and cost considerations.

- Track alignment
- Pit Lane layout
- Lines of Protection (Guardrail/Barrier and Debris Fence)
- Run-off calculations
- Additional safety protection (eg. TecPro barriers)
- Track Kerb design
- Marshal Observation Posts
- Track Recovery Positions
- Track Access Points
- Spectator Fencing



### **C1: DESIGN DEVELOPMENT**

The Design Development Stage will include the commissioning of additional reports, preparation of specifications and design drawings with sufficient detail to enable informed decision and the project and likely costs. The Project Architect will be involved throughout, providing knowledge of local materials, building techniques and planning regulations. It is likely that the Project Architect will be required to submit a formal planning application at this stage.

The concept designs do not comprise complete architectural or construction details, but are used as the basis for more details design, and if appropriate would be included in invitations to tender from other design consultants and contractors.

- Executive Summary
- Site Master Plan (1:2500) updated
- Definition of plots and zones updated
- Environmental analysis
- Sustainability Objectives
- Special Electronics and Track Systems performance specifications report
- Streetscape and Landscape outline designs
- Building footprints and outline floor plans
- Building Elevations and 3D Computer Generated Images
- Building Material Definitions
- Area Schedules
- Engineering Reports
- Site Infrastructure Report including power, water, drainage and lighting
- Geotechnical Report

- Structural Design a preliminary report of issues and recommendations
- Outline Transport Plan
- Access and Circulation Plan
- Micro-climate Analysis
- Project Cost Plan An indicative cost plan will be prepared by an appointed Cost Consultant
- Project Programme up-dated
- Planning Strategy and Guidelines
- Planning Process
- Codes, regulatory guidelines, standards and specifications
- Size, height, layout of buildings
- Styles & architectural design
- Construction methods/materials/finishes

### **C2: TRACK HOMOLOGATION**

The official FIA Track Homologation Dossier will be compiled in required detail and format to ensure approval for FIA track licence. All necessary continued support and communication will be provided during the assessment process including attendance at FIA Safety Department in Geneva.

The Design Development Stage will include the commissioning of additional reports, preparation of specifications and design

- Refined track and pit-lane design
- Geometrical alignment and cross-sections
- Run-off distances, barrier and debris-fencing alignment and design
- Speed Profile and Racing Line
- Track Access and Recovery plans
- Medical and emergency services



#### **FIA REGULATIONS & GUIDELINES**

FIA regulations and guidelines provide the specifications and control of motor sport circuit development, circuit safety and driver safety.

The Appendices to the Sporting Code have been developed over many years of governing global motorsport and detailed analysis.

#### APPENDIX O – PROCEDURES FOR THE RECOGNITION OF MOTOR RACING CIRCUITS

This Appendix by the FIA Circuits Commission is referred to when deciding whether competitions held on the circuit may be entered on the FIA International Sporting Calendar. The specific requirements made of a circuit will be based on the study of the circuit drawings and by the FIA track inspectors.

The procedures include:

Circuit Conception, Facilities, Trackside Structures, Inspections, Accident reporting Circuit Maintenance

#### APPENDIX H - RECOMMENDATIONS FOR THE SUPERVISION OF THE ROAD AND EMERGENCY SERVICES

#### ARTICLE 1

This "defines the aims of the supervision of the road and the emergency services and suggests means for achieving these objectives in the various disciplines of motor sport. The supervision of the road is intended to maintain safe conditions for running a competition, through observation, signalling and intervention. The emergency services seek to provide specialised support when necessary."

The command structure details who is responsible for running the sporting aspect of races and the responsibilities of each person, and includes the development of a Safety Plan which will include the number of emergency services, officials and personnel required to safely run the event.







#### **FIM REGULATIONS**

FIM regulations and guidelines are applicable for motorcycle racing circuits.

FIM circuit licences are issued in grades from A to E according to the categories and groups of motorcycles for which the circuit is considered suitable and are issued with the sole purpose of permitting the registration of races in the FIM Calendar for the categories of motorcycles specified. Grade A is required for MotoGP, whereas Grade B is required for Superbikes.

#### THE FIM STANDARDS FOR CIRCUITS

#### ARTICLE 1

The FIM Standards for Circuits will be used by FIM inspectors for circuit homologation.

Course designers can also use these standards as initial guidance for the construction of new circuits. Practical criteria concerning conception and use are included in these standards to assist the designer of a new circuit in the presentation of a project to the FIM. Circuits that plan modifications to a course can also use these standards as guidelines and have to apply for homologation of the changes.

Exceptions to the following articles may be granted according to the grade of circuit licence.

A study of the circuit drawings will be made for each circuit and FIM inspectors will issue specific requirements. The circuit will have to apply these requirements to achieve homologation. These standards are subject to interpretation depending on each individual case and on local conditions, laws and inspections.

The operators of a circuit are responsible for the safety conditions prevailing within its precincts.

Please note that circuit designers should use these standards as guidance to build the racetrack (up to the second line of protection), the Pit Lane, the Medical Centre and the Race Control room. Basically, these standards deal with all safety-related matters at a circuit.

For all other aspects, please consult the Promoter's Manual of the event's organisers, if existing. For example for MotoGP<sup>™</sup>, please consult Dorna's Promoter's Manual.







### **D1: DETAILED DESIGN**

The Detailed Design stage will include the preparation of technical designs, drawings and specifications and will involve liaison with local government, planning and building authorities and service providers.

The level of detail is determined by the procurement option - in a "Design & Build" contract (D&B), construction drawings are provided by the contractor, whereas in a traditional contract the design will be completed by an appointed architect and engineering consultant. PHG will retain responsibility for the assessment and approval of designs.

- Executive Summary
- Site Master Plan (1:2500) updated
- Definition of plots and zones updated
- Environmental Impact Assessment
- Sustainability Strategy
- Detailed rack Design
- Refined track and pit-lane design
- Engineering Design including asphalt and drainage
- Track markings, kerbs and verge details
- Run-off, barrier and debris-fencing alignment and type
- Secondary fencing
- Geometrical alignment, longitudinal and cross-sections
- Standard details
- Marshal positions and Signalling
- Streetscape and Landscape detailed designs
- Building detailed floor plans

- Building elevations and 3D Computer Generated Images
- Building material definitions detail
- Building Room Schedule
- Structural Design A structural assessment of the detailed building design
- M&E Design The design of building systems including power, heating and ventilation, water supply, drainage, ducting and weatherproofing (depending on procurement option)
- Civil Engineering design infrastructure, power, water, drainage, earthworks, roads, lighting etc.
- Project Cost Plan The cost plan will be up-dated by an appointed Cost Consultant
- Project Programme
- Phasing Analysis including future expansion possibilities

### **D2: SPECIAL ELECTRONICS**

Guideline specifications and system requirements will be defined for "Special Electronics" and track systems. The requirements of these systems will be integrated into the design solution produced during the Design Development stage.

- Timing System
- CCTV
- Marshal Lights
- Network Services



### **E1: PROCUREMENT**

The procurement options and tender process varies between projects but the available PHG services includes:

- Tender Documentation
- Specifications
- Contract Documents
- Programming
- Tender Assessment
- Supplier recommendations Including motorsport specialists
- Contractor Assessments
- Special Electronics

PHG will make direct approach to specialist providers with proven motorsport experience and make recommendations to the client.

### E2: CONSTRUCTION MANAGEMENT

Construction Management services will be dependant on the procurement plan, however PHG will retain overall responsibility for approval of completed work. The range of PHG services includes:

- Contract Administration
- Document Control
- Control of change, issue and risk logs
- Analysis of Risk Assessments
- Approval of method statements
- Site Inspections
- Cost Reporting
- Progress meetings and reporting
- Liaison and reporting Client / Project Manager / Architect / Contractor
- Quality Assurance
- Resolution Management
- Approval and Sign-Off



### **F: CIRCUIT MANAGEMENT**

Motor racing circuits around the world are managed in various ways by owners, leasehold operators or by management operators. A management operator is often the best approach as it provides suitable incentives for the operator and the owner. Many operators fail to provide the level of up to date equipment, quality and service required by the industry and international series promoters, such as F1.

Overall management by a Director of Operations will have a permanent locally recruited motor sport facility Safety Officer trained fully in all Standard and Emergency Operating Procedures. All major events at the motor sport facility will be organised and operated under the auspices of the National Motorsport Association.

Management of the main track requires a team of people under the Director of Operations and Racing who will be responsible for day to day maintenance under the provisions of a Maintenance plan.

The provision of well trained personnel, certified where appropriate, is imperative, although there are some elements could be outsourced (notably security and catering. PHG offers a comprehensive development plan and management consultancy to assist new operators in the formation of a circuit management team and guidance in the acquisition of track vehicles and essential maintenance equipment. An experienced non-executive Chief Operating Officer can be made available during the early period.

Branding and sponsorship opportunities and other revenue generating activities will also be pursued.



### **G1: RACE ORGANISATION**

Responsibility for Race Organisation is dependent on the requirements of different series promoters and is usually defined in detail in their race operations manual. PHG offers the experience necessary to guide local event organisers in the preparation of circuits and facilities.

Commercial opportunities for circuits are also dependent on the promoter agreement for different racing series, and where permitted rights exist, PHG are able to develop revenue streams though commercial agreements and sponsorship.

- Series Promoter Liaison
- Event Overlay and Master Plans
- Event Operations Plans
- Event Branding design
- Paddock Layouts
- Grandstand and Hospitality design
- Media Centre design
- Technical project management
- TV Broadcast liaison
- Medical Centre liaison
- FIA Track inspections
- Overlay Specifications and Procurement
- Contractor and supplier assessment
- Access and Transport Strategy
- Crowd Flow Plans
- Major Incident Plans
- QA/QC
- On-site troubleshooting
- Overall project programme
- Progress meetings and reporting
- Way-finding planning



- Title Sponsorships
- Branding Partnerships
- Trackside Advertisement
- Marketing Plans
- Media Promotions
- Ticketing Strategy
- Hospitality promotion and sales
- Travel Partnerships
- Tourism liaison



### **OUR PARTNERS**



#### **A54 ARCHITECTURE**

Based in Marseille (France), S.lab by Architecture 54 is the fusion of Thierry Lombardi's architectural expertise and his technic mastering in the world of motorsports. Indeed, the company is specialized in the design of motorsport facilities with the goal to integrate and mastered all the elements linked with this kind of projects. S.lab is able to support its clients during the whole process, from the emergence of an idea to its concretization, and then during the operation of a motorsport complex. The practice has based its experience over the past ten years with specific projects, many of which were carried out for the Paul Ricard International Circuit.

S.Lab's work is based on a fine knowledge of motorsports and racetracks.

The practice imagines projects in partnership with its customers to create truly driving experiences.

Finesse and technicality allow to transcribe drivers' expectations in terms of driving and that, early in the design process. In a more global project logic, S.Lab takes advantages of its architectural experience with the company Architecture 54, to imagine requirements and projects which include broader expectations. The idea is to think and design motorsport facilities with a vision that allows the places to attract a wider public than passionate and professional. S.lab is convinced that the future of racetrack is the ability for those places to open-up and diversify their offer and their uses.

The goal is to develop adaptative and evolving location in relation to the using scenarii decided upstream : from driver's club sessions to large events organization.

Moreover, S.lab places security in the center of its interests and tries to best integrate this data since the beginning of the design process. The purpose is to transform security rules into an asset for the track design and the sites' development.







### **OUR PARTNERS**



#### **TECPRO BARRIERS**

All the circuits equipped with TECPRO BARRIERS are FIA, CIK and FIM homologated.

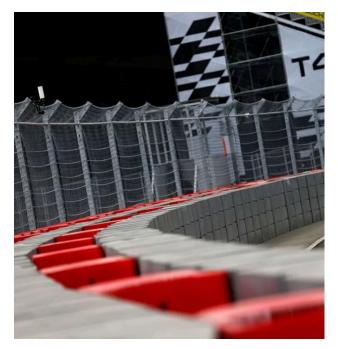
#### A REVOLUTIONARY PROTECTION SYSTEM

As a karting and car driver in the 1990s, Rafael Galiana was personally confronted with numerous defects in the use of tire piles to ensure the circuits 'safety. He carried out a series of experiments before developing the original and patented Tecpro Barriers concept. Consisting of polyethylene blocks connected by an internal strap, Tecpro barriers progressively absorb energy in the event of an impact and provide continuous protection as effective as aesthetic.

Originally from the South of France, Rafael Galiana founded the company Tecpro Barriers in 1998. His meeting with a French roto molding company allowed him to fine-tune the production of the Tecpro Barriers blocks while retaining the simplicity and lightness of the basic concept. After a rapid expansion around the tracks of leisure karting and then of the circuits of competition, Tecpro Barriers has crossed a new stage in succeeding to the acceptance of their blocks for car circuits by the FIA after a long development work.

## COMPARAISON: 1000 LINEAR METERS OF PROTECTION

Filled with modular density foam, reinforced by a double metal foil and connected by three slings, the Tecpro Barriers F1 blocks have a very important absorption power while conserving simplicity of implementation of the basic concept. During the tests carried out in collaboration with the FIA and the independent research firm DEKRA, the Tecpro F1 barriers were able to absorb a frontal impact at more than 200 km / h.



TIRES SYSTEM	TECPRO SYSTEM
18,000 TIRES (IN SIMPLE 6 PACK)	750 REINFORCED BLOCKS (R1)
1000 METERS OF CONVEYOR BELT	370 ABSORBANT BLOCKS (R2)
36,000 STEEL BOLTS	
TRANSPORT: 40 TRUCKS	TRANSPORT: 15 TRUCKS
MANPOWER 20 PERSONS / 20 WEEKS	MANPOWER 6 PERSONS / 10 DAYS



### **OUR PARTNERS**



#### **DZ ENGINEERING**

DZ ENGINEERING is a systems integrator, supplier and engineering contractor specialized in lighting, telecommunications and audiovisual solutions.

- MOTORSPORT SYSTEMS
- SPORTS LIGHTING SOLUTIONS
- TELECOMMUNICATIONS & AUDIO-VISUAL TECHNOLOGIES
- ENERGY & LIGHTING

They have designed and produced lighting and race control systems for sports and motor racing facilities internationally, including the F1 circuits in Singapore, Monza and Sepang Circuit. Over 30 years in industry, DZE's engineers design bespoke projects built on in-depth, specialist knowledge of public and private sectors, from football stadiums to international motor race circuits, ports to offshore platforms, cathedrals, historic buildings and archaeological sites.

DZ Engineering is part of the Dino Zoli group, Italian born and bred company, whose roots and success lie in Romagna, a unique and fascinating region. From the abundance of this area comes the enthusiasm and passion the Dino Zoli Group pours into its work and highquality products.





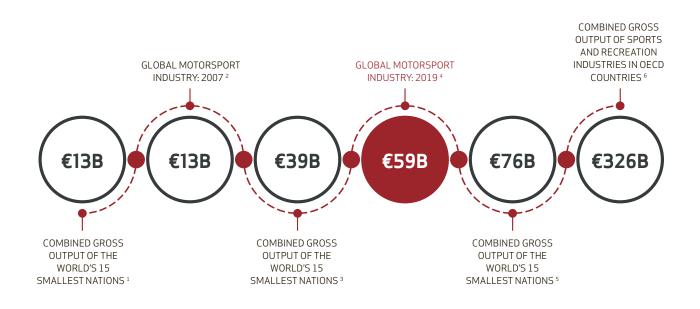


## Global Contribution of Motorsport to Economy & Community Development in 2019



### MOTOR SPORT INDUSTRY SIZE COMPARISON

The economic contribution of the motor sport industry continues to grow and is now larger than the combined Gross Output of the world's 25 smallest nations (all values converted to 2019 EUR to allow for meaningful comparison). The global motor sport industry grew by 90% between 2007 and 2019.



1. Source: EY-Parthenon B.V calculation based on GDP data from World Bank 2017 and Gross Output data from OECD 2017 2. Source: EY-Parthenon B.V. estimate based on previous publication with adjusted boundaries to align with FIA study. 3. Source: EY-Parthenon B.V. calculation based on GDP data from World Bank 2017 and Gross Output data from OECD 2017 4. Source: EY-Parthenon B.V. 5. Source: OECD 2019 6. Source: OECD 2019



### **ECONOMIC CONTRIBUTION**

Motor sport stimulates economic activity across a range of sectors, including advanced manufacturing & engineering, traditional manufacturing and the services sectors.

#### **DIRECT CONTRIBUTION**

The direct contribution of motor sport reflects the economic activity directly generated by all elements of the motor sport industry, including activity generated by motor sport participants, governing bodies, Local Motor Sport Clubs, facilities, tracks and circuits, events, (semi) professional teams and auto-related industries.

In 2019, the motor sport industry directly generated:

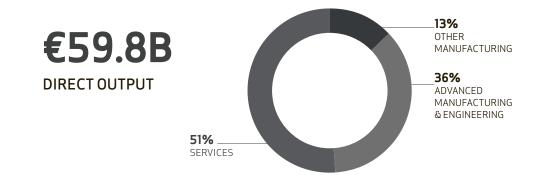




Gross Output represents the is the market value of goods and services (i.e. gross revenue) produced by each segment of the motor sport industry, after accounting for intra-industry sales (to avoid double counting).

Value Add is the market value of goods and services produced by the motor sport industry, after deducting the cost of goods and services used. That is, Value Add is a subset of Gross Output and represents the marginal/additional economic value generated by the motor sport industry. As such, direct value add is commonly put forward as the most appropriate measure of the relative contribution of an industry the economy.

#### BREAKDOWN OF OUTPUT, BY INDUSTRY TYPE





#### TOTAL CONTRIBUTION

The direct economic contribution of the global motor sport industry also generates 'flow on' effects to other industries, including supplier demand for intermediate goods and services and additional consumption by people employed in the motor sport industry.

For example, additional money spent at restaurants by event attendees is allocated between the additional material inputs (such as food and drink), wages, and profits of the proprietor. Wages spent by the employees of the restaurant (for example, on household items) circulates the money throughout a broader section of the economy creating indirect benefits. This includes flow on expenditure on motor sport and non-motor sport related items.

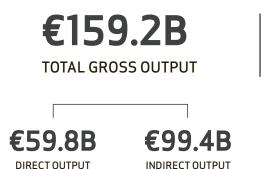




After combining the direct and indirect contribution, in 2019, the motor sport industry generated an economic contribution to the global economy of:

- €159.2b Gross Output, including €59.8b direct and €99.4b indirect output.
- €66.9b Value Add, including €25.0b direct and €41.9b indirect Value Add.

COMBINING DIRECT AND INDIRECT GROSS OUTPUT AND VALUE ADD IN 2019





€25.0B DIRECT VALUE ADD





### **EMPLOYMENT**

The motor sport industry supports a broad range of employment and volunteering opportunities across the economy, including advanced manufacturing & engineering. Employment + formal (unpaid) officials, marshals and volunteers

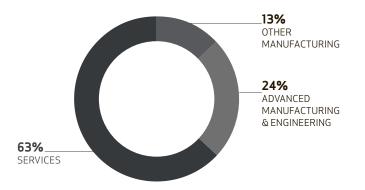
In 2019, the motor sport industry generated over 1.8 million (paid) jobs and (unpaid) formal officials, marshals and volunteers. This includes flow on expenditure on motor sport and non-motor sport related items.



This represents the people employed as a direct result of the  $\in$  59.8b direct output generated by the motor sport industry in 2019.

The direct economic contribution of the global motor sport industry also generates valuable 'flow on' effects to other industries, including supplier demand for intermediate good and services and additional consumption by people employed in the industry.

#### BREAKDOWN OF DIRECT (PAID) EMPLOYMENT BY INDUSTRY TYPE





#### MOTOR SPORT INDUSTRY MAP

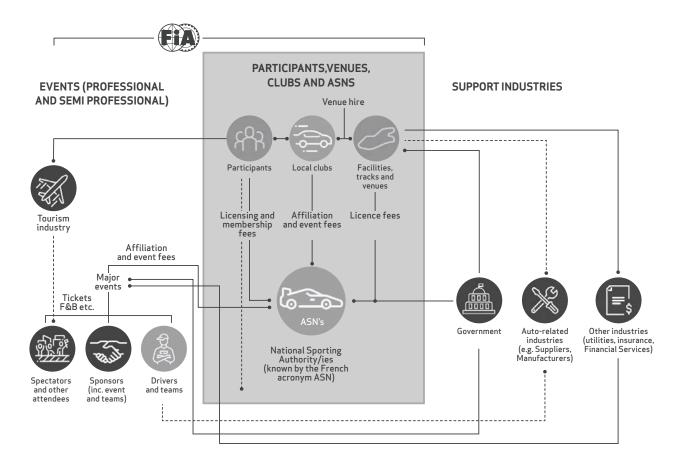
The global motor sport industry includes and supports: participants; events; facilities, tracks and venues; governing bodies; manufacturers and suppliers.

The motor sport industry is made up of the following interrelated components:

- Participants, including: Competitors, Officials, marshals and volunteers, and non-competing club members 2.7m
- Facilities, tracks and circuits 7,200

Professional teams

- Events, including event organisers, teams (see below), event attendees
- Governing bodies, including the FIA and National Sporting Authorities (ASN) 146
- Local Motor Sport Clubs 21,600
- Auto-related industries, including car and component manufacturers.



Core industry component (almost) exclusively motor sport
 Supporting industry component, motor sport and non-motor sport focus

# -International

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