



SPIECAPAG

EMPLOYMENT AND SITE WORK SKILLS MANAGEMENT

International projects performed with hard
conditions

(Yemen, Georgia, Angola, South Africa, Papua
New Guinea, □)

1. Context : What is the problem to solve ?
2. Description of the solution identified in **Papua New Guinea**
3. Benefits
4. Innovation portability

1. Context : What is the problem to solve ?



Integrate promptly and effectively a large volume (70%) of unqualified persons in our operations

- The request to employ local manpower is issued from a triple need :
 - Generate direct economic benefits for the development of local communities,
 - To tend to better community relations and contribute to the social acceptance of the project and contribute to reduce the associated risks: corruption, violence, work stoppage, ...
 - Reduce the costs (remunerations, transports),
- Our clients already understood these objectives and have integrate it in their contracts.

Integrate promptly and effectively a large volume (70%) of unqualified persons in our operations

- Our ability to maximise local employment becomes a competitive bid advantage
- In contrast, tight deadlines (our sites rose 500 m/day so « local » employees quickly remains a stranger), this involves to raise 3 challenges) :
 - ❑ To compensate for the shortage of qualified labor pools crossed forming unskilled labor, with high rates of illiteracy;
 - ❑ To support people who have never worked ;
 - ❑ To facilitate the proper cohabitation with colleagues from different cultures (in Papua, more than 400 clans living and the project represent more than 20 different nationalities.

2. Identified solution

Turnkey management system for employment and skills



Papua New Guinea

In consideration of the various construction areas, Spiecapag has developed skill process management for different jobs needed for construction work of a pipeline. This philosophy can be transposed to all our sites in the world.

60 to 70% of our labour are unexperienced staff and often illiterate, Spiecapag allows to increase qualification of the surrounding site work habitants.

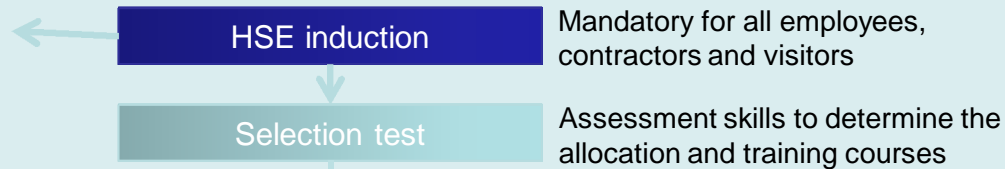


New employee



HSE passport creation, entrance of the employee at the compound

- Badge number
- Photo,
- Follow up training list
- ...



No experience

Competence to complete

Experienced employee

INITIAL TRAINING

Level 1

Employee in training

Acquisition of basic skills with practice of the job:

- Work Safely
- Get acquainted with the tools and working materials and equipments, how to use
- Classroom training in the local language and with videos.

Practices:

- Machines and vehicle simulators

- On the field

Capability test

TRAINING IN THE WORKPLACE

Level 2

Junior employee

The employee is assigned to a team.

To perform the most common operations, he shall gradually acquire a set of skills.

Their acquisition is evaluated by the supervisor.

All qualifications obtained allow to become a senior operator.

Competencies Validation

Level 3

Senior employee

More specific qualifications are issued to the employee. For example, operate in extreme situations (weather topography, environment, ...)

Fail
Demobilisation

Success : Junior operator

Success : Senior operator

Permanent training for all

Raising awarenesses not leading to a qualification are regularly delivered to all the employees, in the course of the activity.

They are realized in group in room, and in morning Tool Box Talk by the working teams on field.

They aim at maintaining a high attention of the employees regarding:

- Know-how to live together (noise pollutions, hygiene, warmheartedness)
- Respect for working rules (not violence, respect for the authority, the respect for schedules)
- Understanding and respect for the cultures
- Work in safety (several tools)
- Environmental protection
- Protection of the cultural and archaeological heritage,



54 training modules :

- 15 modules for construction equipment driving
- 16 modules for restoration jobs
- 23 other trainings

The projections are designed for illiterate people (images, videos, ...).

The comments are in English, Spanish and the local language.

8 Trainers, relayed by all managers

- 3 local
 - 2 trainers « room »
 - 1 trainer for field driving
- 5 Expatriates
 - 1 Safety Leadership trainer
 - 3 trainers for off road driving
 - 1 trainer for construction equipments driving

3 vehicle simulators

- Excavator
- Bulldozer
- Véhicules
 - Articulated truck
 - Trailer
 - Pick up 4WD


Available equipments

- Construction vehicles
 - Excavator
 - Bulldozer
 - Front loader
 - Compactor
 - Muletrax
 - Morooka
 - Yanmar
 - Grader
 - Sideboom
 - Crawler crane
 - backoe
 - Truck
 - Pickup
 - Trailer
- Scaffolder
- Welding machine
- Kitchen unit,...

Databases adapted to territories without registry office (civil status) : identification of the employees by photo, number of ID card, supervised appeal to the name (different writings)

Person Information

BadgeNumber
N-0363




Picture Link [Y:\14_SECURITY\Sec](#)

First Name:	Raphael
Last Name:	MAUA
Sex:	Male
Nationality:	PNG
Lanoo:	KOI
Clan:	
Point of Hire:	
Position:	Excavator operator
Job Colour:	Red
Camp:	Gobe
Sub Camp:	Gobe
Crew:	Backfill
Location:	OR SITE
Status:	Local

Training Completed	
Date	Title
24/11/10	Excavator operator (On the
25/11/10	Excavator operator (On the
31/07/11	Excavator operations [Asse
25/04/11	Excavator operations [Asse
05/09/10	Early works induction
14/09/10	Masrooka operator (On the
09/09/10	Masrooka operator (On the j
09/09/10	Masrooka operator (On the j
09/09/10	Masrooka operator (On the j
13/11/10	Excavator operator (On the
14/11/10	Excavator operator (On the
12/11/10	Excavator operator (On the
17/11/10	Excavator operator (On the
26/11/10	Excavator operator (On the
27/11/10	Excavator operator (On the
29/11/10	Excavator operator (On the
30/11/10	Excavator operator (On the
01/12/10	Excavator operator (On the
02/12/10	Excavator operator (On the
03/12/10	Excavator operator (On the
07/09/10	Excavator operator (On the
05/09/10	Excavator operator (On the
21/09/10	Excavator operator (On the
22/09/10	Excavator operator (On the
24/09/10	Excavator operator (On the
25/09/10	Excavator operator (On the
26/09/10	Excavator operator (On the
23/09/10	Excavator operator (On the
28/09/10	Excavator operator (On the
29/09/10	Excavator operator (On the
02/10/10	Excavator operator (On the
03/10/10	Excavator operator (On the
04/10/10	Excavator operator (On the

TrainingDone




Code	Title
CE31-M	Excavator operations
CE37-M	Screen Bucket Operati
CE37-B	Screen Bucket Operati
CE39-M	Simulation Excavator
CE71-M	Excavation safety (The
CE70-M	Trench design (Theory
CY33-M	KOMATSU Preventive
CY33-B	KOMATSU Preventive
CY33-T	KOMATSU Preventive
JA61-M	Pipeline induction

Outstanding Training

Warnings

HSE passport

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Driving school



Excavator simulator



Semi-trailer simulator



Bulldozer simulator



Track loader (muletrax) training



Front loader (wheel loader) training



Pipe layer (sideboom) training

Driving school: off-road driving





Security



First Aid



Scaffolding



Scaffolding



Health course in classroom



Safety champion program



Managing safely



Housekeeping



Tree felling

Communication

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Training FLASH INFO **Off road Training**

In order to reduce the road traffic accident's risks, an off-road training module has been set up. This training consist of putting drivers in real off-road situations with the supervision of a trainer specialist.

The course is consists of two parts:

- The theory part, performed every days before the practical training by the off-road trainer, to give the trainees an idea of the mechanism of their vehicle, the different types of vehicles, the conditions which can be encountered on site...
- The practical part, in an appropriate site established especially for off-road training purpose, with ditch to cross, slopes to climb, rocky surface, puddle of mud...

The first session already occurred already with five drivers, and had a lot of success with the drivers but also the trainer.



The word of the trainer:

Driving is a hazardous activity, driver must be properly trained to face the different difficulties encountered on the road and the right of way. Maintaining the vehicle is also the responsibility of the drivers, it is important that the drivers understand the mechanism of their vehicle and report any defect to the mechanics.

Christian Le Berre Trainer Off Road



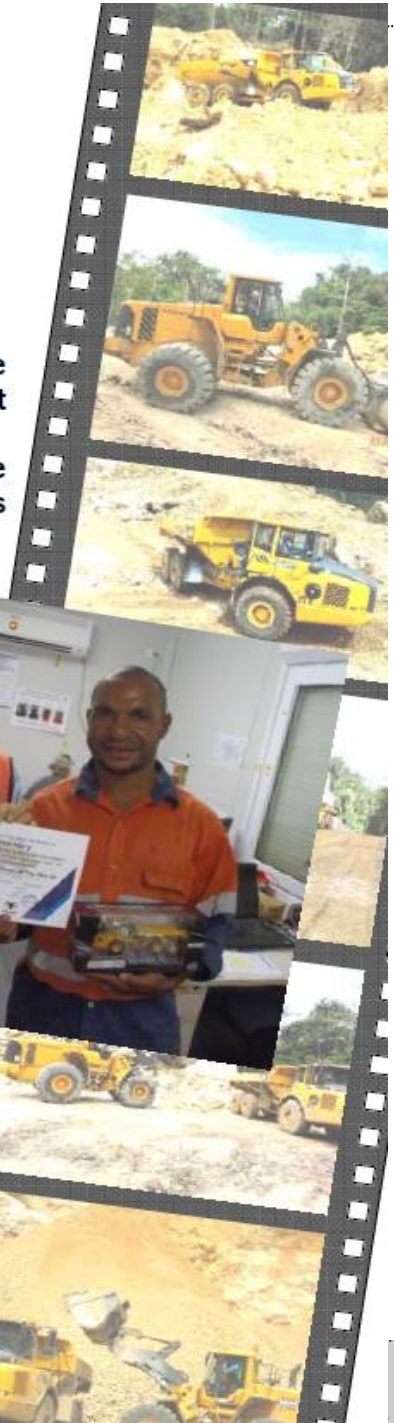
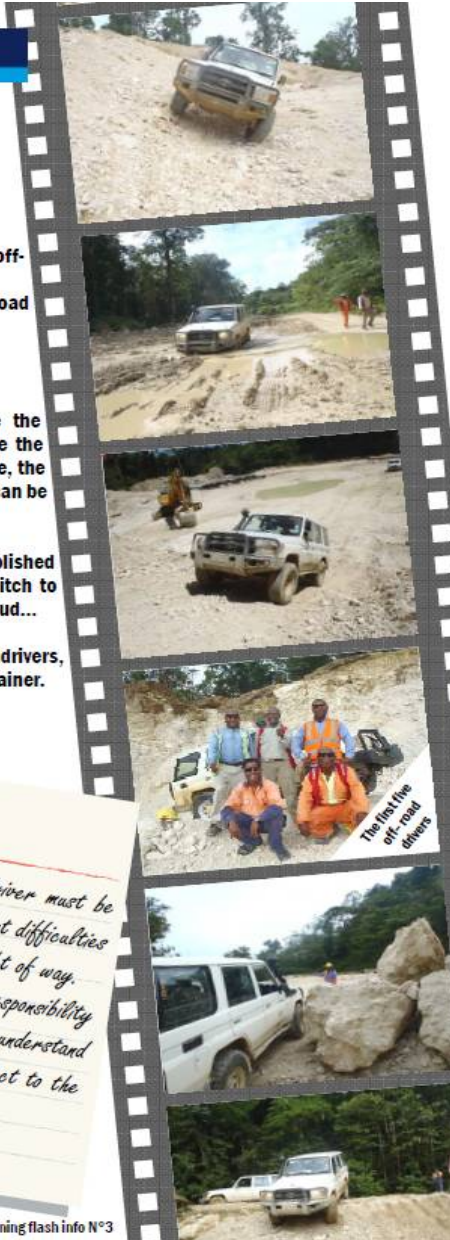
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Training FLASH INFO

Elvis Gerry - Dump Truck Operator of the Month

Elvis Gerry have been working for Spiecapag for more than one year and eight months without any accident or damage to his vehicle.

Spiecapag is pleased to reward all his efforts done from Kopy to Moro and the respect given to his vehicle and his supervisors and his punctuality .



3. Benefits





An effective answer to our operational needs, confronting by a mastered recourse to mobilizations as a matter of urgency of international qualified workforce,

HSE performance is **improved**.

Around **1 000 persons trained for a specialized work** (6 rounds of mobilisation).

More than 100 000 hours of training provided for all site workers.

Improvement of community relations, better acceptance of the project,

Indirect satisfaction of our client,

Improvement of our reputation,

Training type		Nb people
Induction		2674
Construction vehicle drivers	Backhoe	5
	Excavator	57
	Billdozer	32
	Tiptruck	55
	Compactor	10
	Sideboom	6
	Crawler tractor (Morooka, Muletrax,...)	34
Drivers	Driller	10
	Front loader (Prime mover 6x6)	6
	Pickup (4x4)	118
	Bus (4x4)	49
	Truck (Lorry 4x4 et 6x6)	36
	Trailer	50
Other jobs	Dumper 6x6 (Articulated dump truck)	
	Manual welder	10
	Supervisor	8
	Lifting operator	150
	Sand blaster	
	Coating operator	
	Mechanics	
Scaffolder	42	
Tree cutter	72	

Training courses synthesis time-table

Training type		Nb people
Support jobs	Safety officer	
	Security officer	
	Deputy Land Surveyor	
	Environmental officer	
	Quality inspector	
	Cooker	30
	Housekeeping personal (housekeeping & laundry)	120
	Electrician	9
	Plumber	11
	Carpenter	12
First aid		
Safety awareness		
Security awareness		
Quality awareness		
Environment awareness		
Local awareness		

4. Innovation portability



The employment and site work skills management plan (processus, forms, training courses, capacities assessment, control of skills, monitoring and reporting software, ...) is obviously portable to other entities of VINCI.

It will be particularly interesting for subsidiaries brought to manage international projects, particularly in developing countries..

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